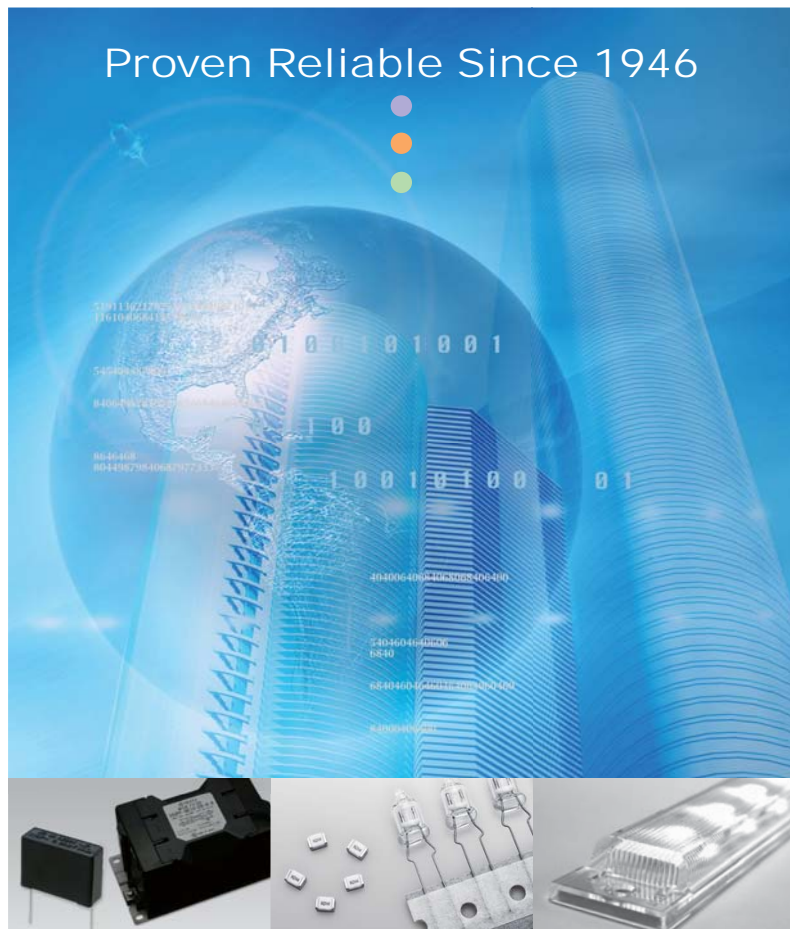




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Okaya is a world wide company that designs, manufactures and markets Electrical Noise Suppression Components and LED products for use in the Electrical and Electronics industry. Okaya is proud to furnish the finest in electrical and electronic support products.

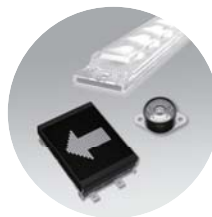
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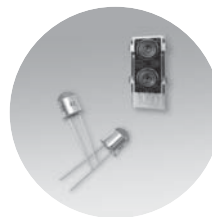
NOISE SUPPRESSION PRODUCTS



SURGE PROTECTIVE DEVICES



DISPLAY PRODUCTS



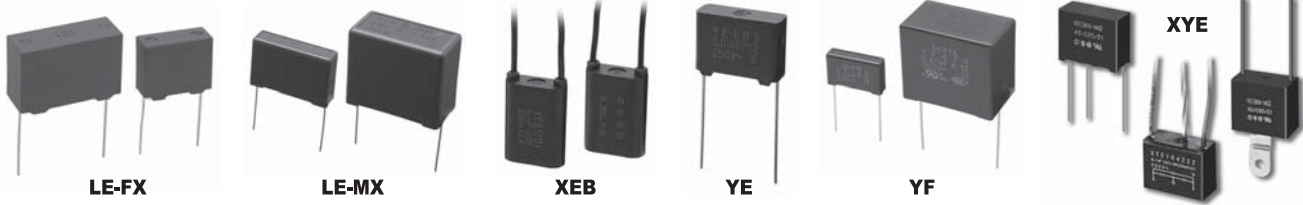
SENSOR PRODUCTS

Company Name:
OKAYA ELECTRIC INDUSTRIES CO.,LTD.
 Founded: **April 11, 1939**
 Established: **June 1, 1946**
 Capital: **¥2,295,160,000 (As of Mar. 31, 2016)**
 Employees:
 OKAYA ELECTRIC INDUSTRIES CO.,LTD.
184 (As of Mar. 31, 2016)
 OKAYA ELECTRIC INDUSTRIES CO.,LTD.
 and Consolidated Subsidiaries
1308 (As of Mar. 31, 2016)



NOISE SUPPRESSION CAPACITOR

Suitable for reducing external noise and high frequency noise such as in brush motors. The outer case gives the capacitor reliability and safety.

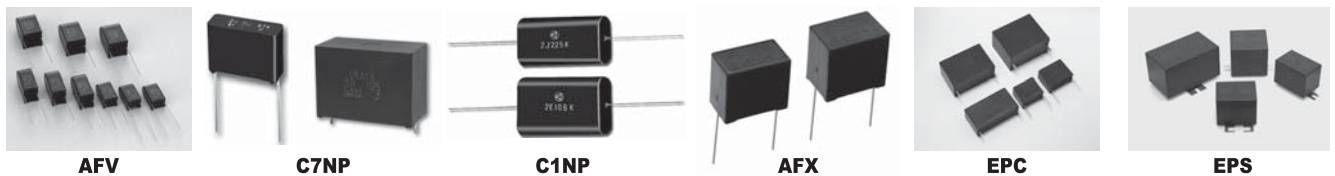


Model Number	Capacitance (μF)	Rated Voltage (Vac)	Class	Test Voltage 50/60Hz 60sec.		Safety Standard											Features	Lead Type *3		
				Line to Line (Vac)	Line to Case (Vac)	UL	CSA(c-UL)	VDE	Electroless	SEMKO	DEMKO	NEMKO	FIMKO	IMQ	OVE	TÜV			ENEC	
LE-FX	0.047~2.2	310	X2	1,000	2,100	○	○	-	-	○	-	-	-	-	-	-	-	○	Variable lead spacing and lead diameter with same capacitance.	②
LE-MX	0.1~2.2	310	X2	1,000	2,100	○	○	-	-	○	-	-	-	-	-	-	-	○	Small type and operating temp is up to 110°C	②
LE	0.01~3.3	275	X2	1,250 ¹	2,100	○	○	-	-	○	-	-	-	-	-	-	-	○	Small and multipurpose type of capacitor for MPP	②
LE-K, LE-K-M	1.5~10	300	X2	1,250 ²	2,100	○	○	-	-	○	-	-	-	-	-	-	-	○	Small package but high capacitance for 300Vac rated voltage	②
RE-L	0.01~2.2	275	X2	1,250	2,100	○	○	○	○	○	○	○	○	○	○	○	○	○	Multipurpose type for MPP	②
PA-L	0.01~2.2	275	X2	1,250	2,000	○	○	○	○	○	○	○	○	○	○	○	○	○	Multipurpose type for MPET	②
XH	0.001~0.0068	500	-	2,200	2,200	-	-	-	-	-	-	-	-	-	-	-	-	-	Rated Voltage 500Vac	②
	0.01~0.47	500	X2	2,000	2,200	○	○	-	-	○	-	-	-	-	-	-	○	-		
REB	0.047~1.0	275	X2	1,250	2,000	○	○	-	-	○	-	-	-	-	-	-	-	○	RE-L Series Flexible wire leads	①
XEB	0.001~0.0068	250	Y2	2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	-	Class X2 Flexible wire leads (0.001 up to 0.0068μF; Class Y2)	①
	0.01~1.0	250	X2	1,250	2,000	○	○	-	○	-	-	-	-	-	-	-	-	-		
XE-Z	0.001~0.0068	275	X1-Y2	2,000	2,100	○	○	○	○	○	○	○	○	○	○	○	○	-	Compliance with Class Y2 with 250Vac Compliance with X1	②
	0.01~1.0	275	X1	1,250	2,100	○	○	○	○	○	○	○	○	○	○	○	○	-		
YF	0.01~0.47	300	Y2	2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	○	Compliance with Class Y2 with rated voltage 300Vac and 110°C	②
YE	0.001~0.1	250	Y2	2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	○	Compliance with Class Y2	②
XYE-AN	0.047~0.47μF+1,000~4,700pF	250	X2-Y2	X1,250 Y2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	-	X and Y combined Capacitor, a lot of series with structural and capacitance	②
XYE-BE	0.047~0.47μF+1,000~4,700pF	250	X2-Y2	X1,250 Y2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	-	X and Y combined Capacitor, a lot of series with structural and capacitance	①
XYE-BN	0.047~0.47μF+1,000~4,700pF	250	X2-Y2	X1,250 Y2,000	2,000	○	○	-	○	-	-	-	-	-	-	-	-	-	X and Y combined Capacitor, a lot of series with structural and capacitance	①
3XYG	X0.1μF+Y3.000pF	440	-	2,000	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	Three phase Capacitor with combined X and Y. Flexible wire leads type	①
3XYG-TY	X0.1μF+Y3.000pF	440	-	2,000	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	Three phase Capacitor with combined X and Y. Bare wire type	②
VE	1.5~10	250	-	1,075Vdc	2,000	-	-	-	○	-	-	-	-	-	-	-	-	-	Capacitor for motor driven intended to Europe	①, ②

*1 3.3μF:1,000Vac *2 C=4.7μF:1,780Vdc

*3 ①Flex PVC Wire ②Bare Wire

HIGH PULSE CAPACITOR·SNUBBER CAPACITOR·CAPACITOR FOR ELECTRICAL EQUIPMENT

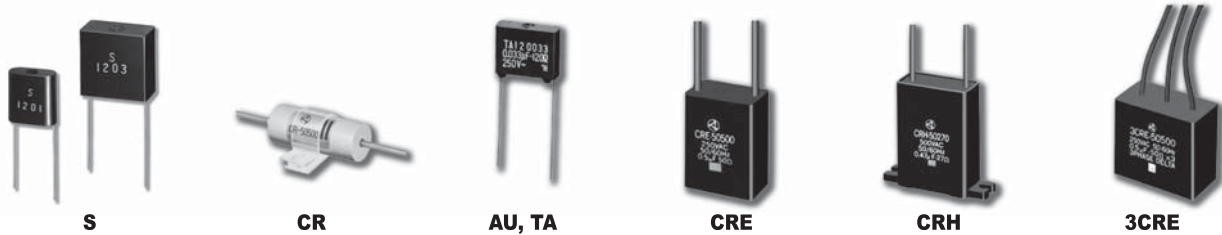


Model Number	Rated Voltage	Capacitance (μF)	Tolerance (±)	Topr (°C)	Features
AFV	450Vdc	0.47, 1.0, 2.2	10%	-40~+85	Suitable for active filter and snubbers for high frequency electronic circuit. The resin case is small-footprint type.
	630Vdc	0.47, 1.0, 2.2	10%	-40~+85	
C7NP	250Vdc	0.1~22.0	5%, 10%	-40~+85	Suitable for high frequency snubbers electronic circuit
	400Vdc	0.047~10.0	5%, 10%	-40~+85	
	630Vdc	0.01~6.8	5%, 10%	-40~+85	
	1,250Vdc	0.0047~1.0	5%, 10%	-40~+85	
	1,600Vdc	0.001~0.047	10%	-40~+85	
HCP-S	450Vdc	0.047~1.0	10%	-40~+85	Suitable for high frequency snubbers electronic circuit, small multipurpose type
	630Vdc	0.01~2.2	10%	-40~+85	
	1,000Vdc	0.1, 0.47, 1.0	10%	-40~+85	
	1,250Vdc	0.01~0.47	10%	-40~+85	
C1NP	250Vdc	2.2~12.0	5%, 10%	-40~+85	Suitable for high frequency snubbers electronic circuit, reeling type
	400Vdc	1.2~4.7	5%, 10%	-40~+85	
	630Vdc	0.82~3.3	5%, 10%	-40~+85	
	1,250Vdc	1.0~4.7	5%, 10%	-40~+85	
HHC	400Vdc	0.033~0.22	5%	-40~+105	Suitable for high frequency resonant circuit with high current, small-footprint
	630Vdc	0.01~0.22	5%	-40~+105	
	1,250Vdc	0.001~0.033	5%	-40~+105	
HHR	800Vdc	0.01~0.068	3%	-40~+105	Suitable for high frequency resonant circuit with high current, small-footprint
AFX	450Vdc	0.47~2.2	10%	-40~+85	Suitable for Active filters(PFC) circuit, small-footprint, lowering vibration
AFS	450Vdc	0.47~4.7	10%	-40~+85	Suitable for Active filters(PFC) circuit, small-footprint
AFC	450Vdc	0.47~4.7	10%	-40~+105	Suitable for Active filters(PFC) circuit
AFP	450, 630Vdc	0.1~2.2	10%	-55~+100	Suitable for Active filters(PFC) circuit
EPC	310Vac, 450Vdc	1.0~47.0	5%	-25~+85	Electric equipment use, safety function
EPS	600Vdc	50, 100, 200	10%	-40~+85	Suitable for snubber circuit and DC link, safety function, high permissible current
	800Vdc	30, 60, 120	10%	-40~+85	



■ SPARK QUENCHER®

A combination of a high-reliability film capacitor and resistor that prevents the occurrence of arcing and sparks at contact points.



Model Number	Rated Voltage (Vac)	Class	Capacitance (μF)	Test Voltage 50/60Hz 60sec.		Safety Standard							Features	Lead Type *2	
				Line to Line (Vac)	Line to Case (Vac)	UL	CSA(C-UL)	VDE	SEMKO	DEMKO	NEEMKO	FIMKO			Electroshield
S	150	-	0.033~0.5	375	1,500	-	-	-	-	-	-	-	-	Multipurpose small foot-print	②
SB	150	-	0.1, 0.2	375	1,500	-	-	-	-	-	-	-	-	Multipurpose small foot-print	①
AU	250	X2	0.033~0.1	1,250 ³	2,000	○	○	○	-	-	-	-	-	Suitable for all over the standards	②
TA	250	X2	0.033	1,080 ³	2,000	○	○	○	-	-	-	-	-	Suitable for Europe, American standards, small-footprint	②
RE	275	X2	0.01~0.2	1,000	2,000	○	○	○	○	○	○	○	○	Suitable for all over the standards, small-footprint	②
XE	250	X2	0.01~1.0	1,250	2,000	○	○	○	○	○	○	○	○	Suitable for all over the standards	②
XEB	250	X2	0.01~1.0	1,250	2,000	○	○	○	○	○	○	○	○	Suitable for all over the standards	①
CR	250	-	0.1~0.5	625	2,000	-	-	-	-	-	-	-	-	Suitable for Japan industrial machine (250Vac)	①
S1-B-0	250	-	0.1	625	2,000	-	-	-	-	-	-	-	-	Multipurpose 250vac (With Clamp)	①
S2-A-0	250	-	0.2	625	2,000	-	-	-	-	-	-	-	-	Multipurpose 250vac (With Clamp)	①
RMTE-FA, MA	250	-	0.22	625	2,000	-	-	-	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
RMTE	250	X2	0.22	1,000	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
3RMES-A0, B0	250	-	0.33/1phase	625	2,000	-	-	-	-	-	-	-	-	Connect to thermal directly.	③
3RMES	250	X2	0.33/1phase	625	2,000	○	-	○	-	-	-	-	-	Connect to thermal directly. Suitable for Europe and American standard.	③
CRE	250	X2	0.1~0.5	625	2,000	○	-	○	-	-	-	-	-	Suitable for Europe, American standards.	①
3CRE *1	250	X2	0.3/1phase 0.5/1phase	625	2,000	○	-	○	-	-	-	-	-	Suitable for Europe, American standards.(Three phase delta connection)	①
6CRE	250	X2	0.5/1phase	625	2,000	○	-	○	-	-	-	-	-	Suitable for Europe, American standards.(Three phase delta connection)	①
CRH	500	-	0.1~0.47	1,250	2,000	○	-	-	-	-	-	-	-	Suitable for America standards(single phase), rated voltage 500Vac	①
3CRH	500	-	0.33/1phase 0.47/1phase	1,250	2,000	○	-	-	-	-	-	-	-	Suitable for America standards(three phase delta connection), rated voltage 500Vac	①
3RDEB	250	-	0.47	884	2,000	-	-	-	-	-	-	-	-	Three phase delta connection with DIN clamp	①
SK01D2E-12033	250	X2	0.33/1phase	625	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
SK02D2E-04747	250	X2	0.47/1phase	625	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
SK03D2E-12033	250	X2	0.33/1phase	625	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
SK07D2E-04747	250	X2	0.47/1phase	625	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③
SK08D2E-04747	250	X2	0.47/1phase	625	2,000	○	○	○	-	-	-	-	-	Connect to electromagnetic switch and contactor directly.	③

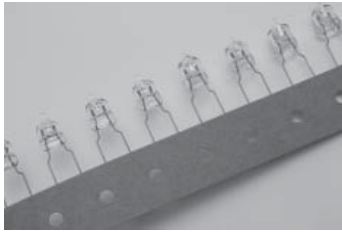
◎: ENEC approved *1 3CRE30680: UL unapproved *2 Lead Type ①: Flex PVC Wire, ②: Bare Wire, ③: Terminal *3 50/60Hz 2~5sec.

■ LINE FILTER FOR SHIELDED ROOM, ANECHOIC CHAMBER

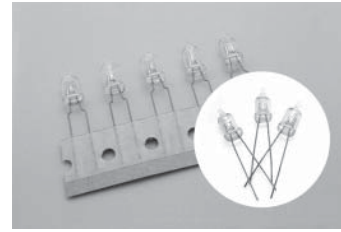


Model Number	Type of Phase	Rated Voltage (Vac)	Rated Current (A)	Frequency Band	Insertion Loss (dB)	Features
DR2□□□D-D10F	Single-phase 2 wire system	500	10, 20, 30, 50, 60, 100, 150	150KHz~18GHz	100	Common mode, low leakage current
DR3□□□D-D10F	Three-phase 3 wire system	500	10, 20, 30, 50, 100	150KHz~18GHz	100	Common mode, low leakage current
DR4□□□D-D10F	Three-phase 4 wire system	500	20, 30, 50, 100	150KHz~18GHz	100	Common mode, low leakage current
DR1□□□D-D10F	1 wire system	300	10, 20, 30, 50, 60, 100, 120, 150	100KHz~18GHz	100	Normal mode
DR2□□□D-D00F	Single-phase 2 wire system	500	10, 20, 30, 50, 60, 100, 200	14KHz~18GHz	100	Common mode, low leakage current
DR3□□□D-D00F	Three-phase 3 wire system	500	10, 20, 30, 50, 100, 200	14KHz~18GHz	100	Common mode, low leakage current
DR4□□□D-D00F	Three-phase 4 wire system	500	20, 50, 100, 300	14KHz~18GHz	100	Common mode, low leakage current
DR1□□□D-D00F	1 wire system	300	10, 20, 30, 50, 60, 100, 150, 300	14KHz~18GHz	100	Normal mode
DR2□□□D-D00F-UL	Single-phase 2 wire system	250	6, 32, 63, 100	14KHz~18GHz	100	Common mode, UL1283 approved
DR4□□□D-D00F-UL	Single-phase 4 wire system	440	32, 63, 100	14KHz~18GHz	100	Common mode, UL1283 approved

We offer products that are appropriate for each facility's security level and also accept custom made orders.



RA-MX-V7-Y,Y(5)



RA-C6

■ GAS DISCHARGE TUBE RA-MX-V7-Y,Y(5) Series

The RA-MX series is a radial type high voltage surge absorber that can tolerate withstand voltage tests.

Model Number	DC Breakdown Voltage (V)	Impulse Sparkover Voltage 1.2/50 μ s		Insulation Resistance (M Ω) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20 μ s 100A (Times)	Impulse Current Capacity 8/20 μ s (A)	Withstand Voltage Test	Safety Standard			
		Applied Voltage	Specification						UL 1449	CSA C22.2 No.60065	TÜV EN 60950-1 EN 60065	JQA J60065 (H26)
RA-501MX-V7-Y/Y(5)	500(400~600)	-	-	10 ³ (DC100V)	1.0	300	3,500	-	○ ¹ *3	○ ⁴ *5	-	-
RA-601MX-V7-Y/Y(5)	600(480~720)			10 ³ (DC250V)				-	○ ¹ *3	○ ⁴ *5	-	-
RA-102MX-V7-Y/Y(5)	1,000(800~1,200)			-				-	○ ² *3	○ ⁴ *5	-	-
RA-152MX-V7-Y/Y(5)	1,500(1,200~1,800)			-				-	○ ² *3	○ ⁴ *5	-	-
RA-242MX-V7-Y/Y(5)	2,400(1,920~2,880) ⁷	5,000V	5,000V max.	10 ³ (DC500V)	1.0	300	3,500	AC1,250V 3s	○ ² *3	○ ⁴ *5	○ ⁶	-
RA-302MX-V7-Y/Y(5)	3,000(2,400~3,600) ⁷							AC1,500V 60s	○ ¹ *3	○ ⁴ *5	○ ⁶	-
RA-362MX-V7-Y/Y(5)	3,600(2,880~4,320) ⁷							AC1,800V 3s	○ ¹ *3	○ ⁴ *5	○ ⁶	-
RA-402MX-V7-Y/Y(5)	4,000(3,200~4,800) ⁷							7,500V	7,500V max.	10 ³ (DC1000V)	AC2,000V 60s	○ ¹ *3
RA-452MX-V7-Y/Y(5)	4,500(3,600~5,400) ⁷	8,000V	8,000V max.	10 ³ (DC1000V)	AC2,000V 60s	○ ¹ *3	○ ⁴ *5	○ ⁶	-			
RA-402MX-V7-Y(SJQ)	4,000(3,200~4,800) ⁷	7,500V	7,500V max.	10 ³ (DC500V)	AC2,000V 60s	○ ¹ *3	○ ⁴ *5	○ ⁶	○			
RA-452MX-V7-Y(SJQ)	4,500(3,600~5,400) ⁷	8,000V	8,000V max.	10 ³ (DC1000V)	AC2,000V 60s	○ ¹ *3	○ ⁴ *5	○ ⁶	○			

*1 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA \geq 270V, D \geq 7mm)

*2 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA \geq 270V, D \geq 5mm)

*3 Rated voltage AC250V: Approved if it is connected to UL approved varistor (V1.0mA \geq 390V, D \geq 7mm)

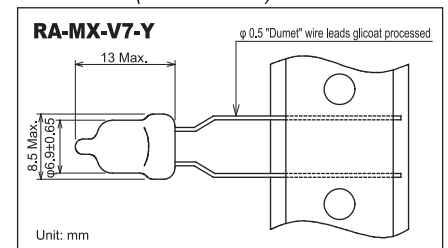
*4 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA \geq 270V, D \geq 14mm)

*5 Rated voltage AC250V: Approved if it is connected to UL approved varistor (V1.0mA \geq 470V, D \geq 14mm)

*6 Rated voltage AC125V/AC250V: Approved if it is connected to UL approved varistor (V1.0mA \geq 470V, D \geq 5mm)

*7 Reference value

Dimensions (RA-MX-V7-Y)



■ GAS DISCHARGE TUBE RA-C6 Series

Model Number P: No markings M: Markings	DC Breakdown Voltage (V)	Impulse Sparkover Voltage		Insulation Resistance (M Ω) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20 μ s 100A (Times)	Impulse Current Capacity 8/20 μ s (A)	Withstand Voltage Test	Safety Standard			
		Applied Voltage	Specification						UL 497B	UL 1449	cUL C22.2 No.8	TÜV EN 60950-1 EN 60065
RA-800P/M-C6	80(64~96)	-	-	10 ³ (DC50V)	1.0	300	2,000	-	○	-	-	-
RA-151P/M-C6	150(120~180)			-				○	-	-	-	
RA-201P/M-C6	200(160~240)			-				○	-	-	-	
RA-231P/M-C6	230(184~276)			-				○	-	-	-	
RA-311P/M-C6	310(264~356)	1kV/10 μ s	600V max.	10 ³ (DC100V)	1.0	300	2,000	-	○	○ ¹	-	-
RA-351P/M-C6	350(280~420)							-	○	○ ¹	-	-
RA-391P/M-C6	390(312~468)							-	○	○ ¹	-	-
RA-501P/M-C6	500(400~600)							-	○	○ ¹	-	-
RA-601P/M-C6	600(480~720)	-	-	10 ³ (DC250V)	1.0	300	2,000	-	-	○ ¹ *2	-	-
RA-102P/M-C6	1,000(800~1,200)			-				-	○ ¹ *2	-	-	
RA-152P/M-C6	1,500(1,200~1,800)			-				-	○ ¹ *2	-	-	
RA-272M-C6	2,700(2,160~3,240) ⁴			1.2/50 μ s				5,000V max.	10 ³ (DC500V)	AC1,250V 3s	-	○ ¹
RA-302M-C6	3,000(2,400~3,600) ⁴	5kV	5,000V max.	10 ³ (DC500V)	1.0	300	2,000	AC1,500V 60s	-	○ ¹ *2	○ ¹ *2	○ ³
RA-302M-C6(AC)	3,000(2,700~3,900) ⁴							AC1,800V 3s	-	○ ¹ *2	○ ¹ *2	○ ³

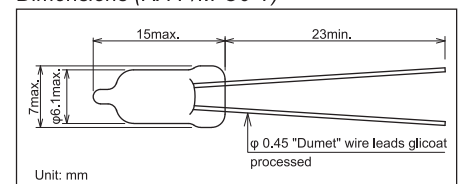
*1 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA \geq 270V, D \geq 5mm)

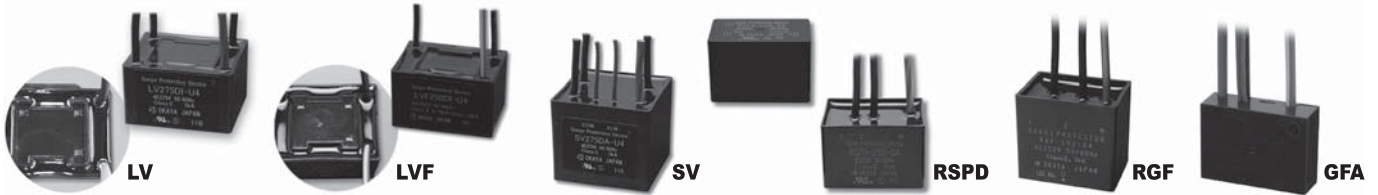
*2 Rated voltage AC250V: Approved if it is connected to UL approved varistor (V1.0mA \geq 390V, D \geq 7mm)

*3 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA \geq 470V, D \geq 5mm)

*4 Reference value

Dimensions (RA-P/M-C6-Y)





■ SURGE PROTECTIVE DEVICE LV Series

Model Number	Max. Continuous Operating Voltage 50/60Hz		DC Operating Voltage (V) ±25%	Voltage Protection Level (V)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Impulse Life Test 8/20µs 1,000A (times)	Safety Standard			
	Phase	AC Voltage						UL 1449	cUL C22.2 No.8	SEMKO IEC 61643-1	SEMKO EN 61643-11
LV150DI-Q4	1 Phase	AC150V	450	1,200	2,500	5,000	Approx. 500	○	○	○	○
LV275DI-Q4	1 Phase	AC275V	800	1,500				○	○	○	○
LV275DI-U4	3 Phase	AC275V	1,400	2,000				○	○	○	○
LV480DI-Q4	1 Phase	AC480V						○	○	○	○
LV480DI-U4	3 Phase	AC480V	1,600	2,500				○	○	○	○
LV550DI-U4	3 Phase	AC550V						○	○	○	○

■ SURGE PROTECTIVE DEVICE LVF Series

Model Number	Max. Continuous Operating Voltage 50/60Hz		DC Operating Voltage (V) ±25%	Voltage Protection Level (V)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Impulse Life Test 8/20µs 1,000A (times)	Safety Standard			
	Phase	AC Voltage						UL 1449	cUL C22.2 No.8	SEMKO IEC 61643-1	SEMKO EN 61643-11
LVF150DI-Q4	1 Phase	AC150V	450	1,200	5,000	10,000	Approx. 500	-	-	-	-
LVF250DI-Q4	1 Phase	AC250V	700	1,500				-	-	-	-
LVF250DI-U4	3 Phase	AC250V						-	-	-	-
LVF300DI-Q4	1 Phase	AC300V	1,000	2,000				-	-	-	-
LVF300DI-U4	3 Phase	AC300V						-	-	-	-
LVF480DI-Q4	1 Phase	AC480V	1,400	2,500				-	-	-	-
LVF480DI-U4	3 Phase	AC480V			-	-	-	-			

■ SURGE PROTECTIVE DEVICE SV Series

Model Number	Max. Continuous Operating Voltage 50/60Hz		DC Operating Voltage (V) ±25%	Voltage Protection Level (V)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Impulse Life Test 8/20µs 1,000A (times)	Safety Standard			
	Phase	AC Voltage						UL 1449	cUL C22.2 No.8	SEMKO IEC 61643-1	SEMKO EN 61643-11
SV150DA-Q4	1 Phase	AC150V	450	1,200	2,500	5,000	Approx. 500	-	-	-	-
SV275DA-Q4	1 Phase	AC275V	800	1,500				-	-	-	-
SV275DA-U4	3 Phase	AC275V						○	○	○	○
SV480DA-Q4	1 Phase	AC480V	1,400	2,000				-	-	-	-
SV480DA-U4	3 Phase	AC480V						-	-	-	-
SV550DA-U4	3 Phase	AC550V	1,600	2,500				-	-	-	-

■ SURGE PROTECTIVE DEVICE RSPD Series

Model Number	Max. Continuous Operating Voltage 50/60Hz		DC Operating Voltage (V) ±25%	Voltage Protection Level (V)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Impulse Life Test 8/20µs 1,000A (times)	Safety Standard		
	Phase	AC Voltage						UL 1449	cUL C22.2 No.8	TÜV EN 60950-1 EN 60065
RSPD-150-Q-4/5	1 Phase	AC150V	400	800	2,500	5,000	Approx. 300	○	○	○
RSPD-250-Q-4/5	1 Phase	AC250V	700	1,300				○	○	○
RSPD-250-U-4/5	3 Phase	AC250V						○	○	○
RSPD-420-Q-4/5	1 Phase	AC420V	1,100	1,500				○	○	○
RSPD-420-U-4/5	3 Phase	AC420V						○	○	○
RSPD-500-Q-4/5	1 Phase	AC500V	1,300	2,000				○	○	○
RSPD-500-U-4/5	3 Phase	AC500V			○	○	○	○		
RSPD-600-Q-4/5	1 Phase	AC600V	1,500	2,500	○	○	○			
RSPD-600-U-4/5	3 Phase	AC600V			○	○	○	○		

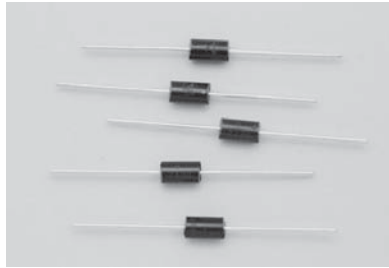
■ SURGE PROTECTIVE DEVICE RGF Series

Model Number	Rated Voltage (Vac) 50/60Hz	Max. Line Voltage (Vac)	Varistor Voltage (V) ±10%	DC Breakdown Voltage Ez(V)+30/-20%	Impulse Discharge Current 8/20µs(A)	Impulse Life Test 8/20µs 1,000A (times)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Voltage Protection Level (V)	Safety Standard		
										UL1449	cUL C22.2 No.8	
RGF-152-Q4	1-2	250	300	470	-	5,000	Approx. 300	-	-	-	-	
	1,2- $\frac{1}{2}$	-	-	-	1,200							
RGF10-152-Q4	1-2	250	300	470	-	-	Approx. 500	5,000	10,000	1,500	○	○
	1,2- $\frac{1}{2}$	-	-	-	1,200							

■ SURGE PROTECTIVE DEVICE GFA Series

Model Number	Rated Voltage (Vac) 50/60Hz	Max. Continuous Operating Voltage 50/60Hz	Varistor Voltage (V) ±10%	DC Breakdown Voltage Ez(V)+30/-20%	Impulse Life Test 8/20µs 1,000A (times)	Nominal Discharge Current 8/20µs (A)	Max. Discharge Current 8/20µs (A)	Voltage Protection Level (V)	Safety Standard			
									UL 1449	cUL C22.2 No.8	UL-EU IEC61643-311 EN61643-311	
GFA-300-Q4	L-N	250	300	480	-	Approx. 300	2,500	5,000	1,400	○	○	○*
	L, N-G	-	-	-	1,200							

*IEC/EN61643-11 Application pending



B, U

■ AVALANCHE BREAKDOWN DIODE 2000 Series

Rated Peak Impulse Power Dissipation 18,000W (8/20μs)

Model Number	Nominal Breakdown Voltage V _{BR} (V)	Maximum Working Voltage V _{WM} (V)
U2007	7.5	6.05
B2008	8.2	6.63
B2010	10.0	8.10
B2012	12.0	9.72
□ 2018	18.0	14.50
□ 2022	22.0	17.80
B2027	27.0	21.80
□ 2033	33.0	26.80
□ 2039	39.0	31.60
□ 2047	47.0	38.10
B2056	56.0	45.50
B2068	68.0	55.10
B2082	82.0	66.40
B2100	100.0	81.00
B2150	150.0	121.00
□ 2180	180.0	146.00
B2220	220.0	175.00
B2250	250.0	202.00
B2300	300.0	243.00
B2400	400.0	324.00

* U: Uni-Polar type, B: Bi-Polar Type, □: Both U and B
*Please feel free to inquire about any other request.

■ AVALANCHE BREAKDOWN DIODE 3000 Series

Rated Peak Impulse Power Dissipation 34,000W (8/20μs)

Model Number	Nominal Breakdown Voltage V _{BR} (V)	Maximum Working Voltage V _{WM} (V)
B3008	8.2	6.63
B3010	10.0	8.10
□ 3015	15.0	12.10
□ 3018	18.0	14.50
U3022	22.0	17.80
□ 3033	33.0	26.80
B3036	36.0	29.16
U3039	39.0	31.60
B3056	56.0	45.50
□ 3068	68.0	55.10
B3082	82.0	66.40
U3180	180.0	146.00

* U: Uni-Polar type, B: Bi-Polar Type, □: Both U and B

■ AVALANCHE BREAKDOWN DIODE 5000 Series

Rated Peak Impulse Power Dissipation 44,000W (8/20μs)

Model Number	Nominal Breakdown Voltage V _{BR} (V)	Maximum Working Voltage V _{WM} (V)
B5008	8.2	6.63
B5010	10.0	8.10
□ 5015	15.0	12.10
□ 5018	18.0	14.50
U5022	22.0	17.80
□ 5033	33.0	26.80
B5036	36.0	29.16
U5039	39.0	31.60
B5056	56.0	45.50
□ 5068	68.0	55.10
B5082	82.0	66.40
U5180	180.0	146.00

* U: Uni-Polar type, B: Bi-Polar Type, □: Both U and B

■ SURGE PROTECTIVE DEVICE R-A-M-LED Series

Model Number	Rated Voltage (Vac) 50/60Hz	Max. Line Voltage (Vac)	Varistor Voltage (V) ±10%	DC Breakdown Voltage E _z (V) +30/-20%	Impulse Discharge Current 8/20μs(A)	Insulation Resistance IR (MΩ) min. DC500V	Withstand Voltage Test (Vac)	Safety Standard	
								TÜV	
R-A-M-242BWZ(LED)	1-2	125	140	540	-	2,000	1,000	-	
	1,2- $\frac{1}{2}$	-	-	-	2,400			-	
R-A-M-302BWZ(LED)	1-2	250	300	940	-			AC1,000V 60s AC1,250V 3s	-
	1,2- $\frac{1}{2}$	-	-	-	3,000			AC1,500V 60s	○
R-A-M-362BWZ(LED)	1-2	250	300	940	-			-	-
	1,2- $\frac{1}{2}$	-	-	-	3,600			AC1,500V 60s AC1,800V 3s	○
R-A-M-362BXZ(LED)	1-2-3-1	250	300	940	-			-	-
	1,2,3- $\frac{1}{2}$	-	-	-	3,600			AC1,500V 60s AC1,800V 3s	○
R-A-M-302BUZ-N(LED)	1-2-3-1	250	300	470	-			-	-
	1,2,3- $\frac{1}{2}$	-	-	-	3,000			AC1,500V 60s	-
R-A-M-152BQZ(LED)	1-2	250	300	470	-			-	-
	1,2- $\frac{1}{2}$	-	-	-	1,200±30%			-	-

■ SURGE PROTECTIVE DEVICE

RSP-485
PCB mounting type

RSP-485M
DIN rail box type
*DIN rail is optional.

RSP-TEL-B
For telephone line,
Box with modular jack type

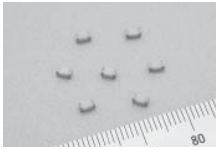
RSD5-485
For RS-485 and RS-422
signal circuit
*DIN rail is optional.

RSP-485-PT
Terminal block type

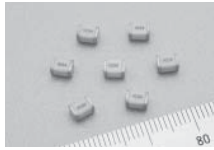
RSP-232-9
For RS(EIA)-232,
9 pin type(D-sub)

R-S-M-GL-PT
For data signal line
and control line

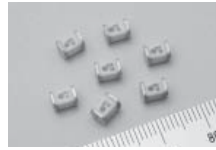
RLAN2
Surge Protective Device
For LAN



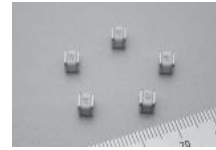
RHCA3216



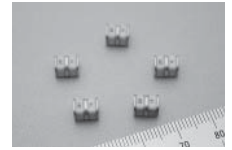
RHCA4532



RHCA5639



R5K



R5K3

■ GAS DISCHARGE TUBE RHCA3216 Series

Model Number *1	DC Breakdown Voltage (V)	Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20μs 100A (times)	Impulse Current Capacity *2 8/20μs Positive/Negative 5 times (A)	Impulse Withstanding Voltage Capacity *2 10/700μs Positive/ Negative 5times (V)	Safety Standard
RHCA-900□31U	90	10 ³ (DC50V)	0.3	300	500(R=2Ω)	4,000(R=40Ω)	UL497B
RHCA-201□31U	200						○
RHCA-301□31U	300						○
RHCA-401□31U	400	○					
RHCA-501□31U	500	○					

*1 □:Tolerance ±20%=P, ±30%=Q *2 Comforms to ITU-T K.20, K.21 Enhanced Test

■ GAS DISCHARGE TUBE RHCA4532 Series

Model Number *1	DC Breakdown Voltage (V)	Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20μs 100A (times)	Impulse Current Capacity *2 8/20μs Positive/Negative 5 times (A)	Impulse Withstanding Voltage Capacity 10/700μs Positive/ Negative 5times (V)	Safety Standard
RHCA-900□43U	90	10 ³ (DC100V)	0.6	300	2,000 (R=2Ω)	4,000(R=40Ω)	UL497B
RHCA-201□43U	200						○
RHCA-301□43U	300						○
RHCA-351□43U	350						○
RHCA-401□43U	400						○
RHCA-401R43U	400 ^{+30%} / _{-37%}						○
RHCA-501□43U	500						○
RHCA-601□43U	600						○

*1 □:Tolerance ±20%=P, ±30%=Q *2 Comforms to ITU-T K.20, K.21 Enhanced Test

■ GAS DISCHARGE TUBE RHCA5639 Series

Model Number	Impulse Sparkover Voltage 1.2/50μs		Withstand Voltage Test	Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20μs 100A (times)	Impulse Current Capacity 8/20μs (A)	DC Breakdown Voltage (V) ±20%	Safety Standard		
	Applied Voltage	Specification							UL1449	cUL C22.2 No.8	UL-EU IEC61643-311 EN61643-311
RHCA-102P53U(335)	5,000V	4,500V max.	AC1,000V 60s	10 ³ (DC50V)	0.6	300	2,000	1,000 ±20%	○	○	○
RHCA-102Q53U(335)								1,000 ±30%	○	○	○
RHCA-202H53U(335)								2,000 ±20% ³	○ ¹	○ ¹	○
RHCA-242H53U(335)								2,400 ±20% ³	○ ¹	○ ¹	○
RHCA-272H53U(335)								2,700 ±20% ³	○ ¹	○ ¹	○
RHCA-302H53U(335)								3,000 ±20% ³	○ ^{1,2}	○ ^{1,2}	○
RHCA-362H53U(335)								3,600 ±20% ³	○ ^{1,2}	○ ^{1,2}	○
RHCA-402H53U(335)								4,000 ±20% ³	○ ^{1,2}	○ ^{1,2}	○
RHCA-422H53U(335)								4,200 ±20% ³	○ ^{1,2}	○ ^{1,2}	○
RHCA-452H53U(335)								4,500 ±20% ³	○ ^{1,2}	○ ^{1,2}	○

*1 Rated voltage AC125V: Approved if it is connected to UL approved varistor (V1.0mA≥270V, D≥φ 7mm)

*2 Rated voltage AC250V: Approved if it is connected to UL approved varistor (V1.0mA≥470V, D≥φ 7mm)

*3 Reference value

■ GAS DISCHARGE TUBE R5K Series

Model Number*1	DC Breakdown Voltage (V)	Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20μs 100A (times)	Impulse Current Capacity*2 8/20μs Positive/Negative 5 times (A)	Impulse Withstanding Voltage Capacity*2 10/700μs Positive/Negative 5 times (V)
R5K-750□45U	75	10 ³ (DC50V)	1.0	300	5,000 (R=2Ω)	15,000(R=40Ω)
R5K-900□45U	90					
R5K-231□45U	230	10 ³ (DC100V)				
R5K-251□45U	250					
R5K-351□45U	350					
R5K-421□45U	420					
R5K-501□45U	500					
R5K-601□45U	600					

*1 □:Tolerance ±20%=P, ±30%=Q *2 Comforms to ITU-T K.20, K.21 Enhanced Test

■ GAS DISCHARGE TUBE R5K3 Series

Model Number*1	DC Breakdown Voltage (V)	Insulation Resistance (MΩ) min.	Capacitance 1MHz (pF) max.	Impulse Life Test 8/20μs 100A (times)	Impulse Current Capacity*2 8/20μs Positive/Negative 5 times (A)	Impulse Withstanding Voltage Capacity*2 10/700μs Positive/Negative 5 times (V)
R5K3-750□65U	75	10 ³ (DC50V)	1.0	300	5,000 (R=2Ω)	15,000(R=40Ω)
R5K3-900□65U	90					
R5K3-231□65U	230	10 ³ (DC100V)				
R5K3-251□65U	250					
R5K3-351□65U	350					
R5K3-421□65U	420					
R5K3-501□65U	500					
R5K3-601□65U	600					

*1 □:Tolerance ±20%=P, ±30%=Q *2 Comforms to ITU-T K.20, K.21 Enhanced Test



BAR TYPE LED RSN Series

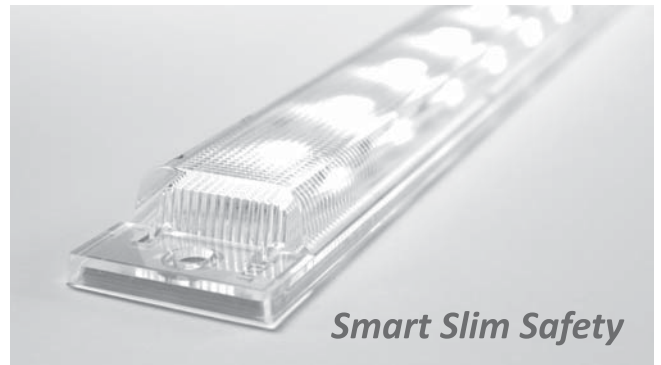
Features

- 0.37 inch thin design
- Waterproof construction is equivalent to IP64. (except for terminal of cable)
- Environmentally friendly: Low power consumption, mercury-free, RoHs directive compliant.
- With protective function against surge, overcurrent, backward voltage

Applications

- Inner lighting inside machine tool.
- Lighting for difficult place to replace.
- Lighting for maintenance of fire-prevention equipment.
- Safe light for plant facilities and building facilities.

Specification



RSN-8 Series (Size to similar fluorescent tube 8W)



RSN-4 Series (Size to similar fluorescent tube 4W)



Ta=25°C

Model Number*	Emitting Color	Size W x H x D (inch) approx.	Rated Voltage (V) ±5%	Dissipation Power (W) typ.	Operating Temperature Limit (°C)	Storage Temperature Limit (°C)	Luminous Flux φ (lm) typ.	Luminous Intensity Iv (cd) typ.	Color Temperature (K) typ.	Dominant Wave Length λd (K) typ.	Directivity Angle 2θ1/2 (°) typ.
RSN-DW8C-□□□	Day white	11.26 x 0.37 x 0.91	DC24	4.6	-20 ~ +50	-20 ~ +70	230	60	6,500	-	120
RSN-R8C-□□□	Red	11.26 x 0.37 x 0.91	DC24	2.4	-20 ~ +50	-20 ~ +70	35	10	-	634	120
RSN-A8C-□□□	Amber	11.26 x 0.37 x 0.91	DC24	2.4	-20 ~ +50	-20 ~ +70	40	15	-	595	120
RSN-PG8C-□□□	Pure green	11.26 x 0.37 x 0.91	DC24	2.0	-20 ~ +50	-20 ~ +70	36	14	-	525	120
RSN-B8C-□□□	Blue	11.26 x 0.37 x 0.91	DC24	1.9	-20 ~ +50	-20 ~ +70	30	8	-	475	120
RSN-DW4C-□□□	Day white	6.02 x 0.37 x 0.91	DC24	2.2	-20 ~ +50	-20 ~ +70	115	30	6,500	-	120

*□□□: 101(Restitution type overcurrent protection installed), 202(Overcurrent protection installed)

LED 7 SEGMENT DISPLAY & LED DOT MATRIX DISPLAY UNIT



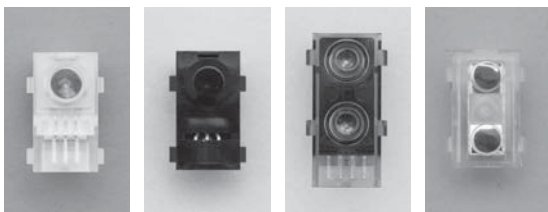
RCN-SDA03R3NL



RLU64D-1632

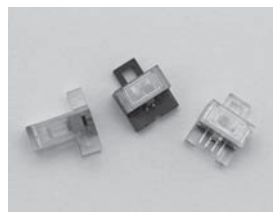
SENSOR PRODUCTS

TRANSMISSIVE PHOTOINTERRUPTER



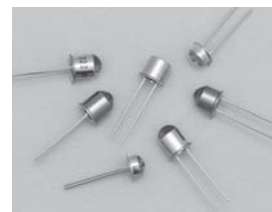
RPU85□□ Series Separate Light Emission Diode
RPU86□□ Series Separate Photo Detector
RPU87□□ Series Integral device receiving / emission
Prism

PHOTO REFLECTER



RPU813 Series

INFRARED LED EMITTING COLLIMATED LIGHT



RLD2□□ Series

HIGH POWER INFRARED LED



RLD24-IR Series



MAIN PRODUCTS



NOISE SUPPRESSION PRODUCTS



SURGE PROTECTIVE DEVICES



DISPLAY PRODUCTS



SENSOR PRODUCTS

OKAYA OKAYA Electric Industries Co., Ltd.

<http://www.okayaelec.co.jp>

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