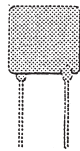


RGEF250



RGEF300-RGEF1400

POLYSWITCH RADIAL-LEADED RGEF SERIES

This product line can be used in a wide variety of automotive, computer and general electronics applications. The RGE devices feature high current carrying capability (up to 11 amps) in a small package with fast trip times. **APPLICATIONS:** Audio speakers. Fire and security alarm systems. Motors. Power supplies. Solenoids/Valves. Medical equipment. Test instruments. Industrial controls. Automotive small-motor and electronic circuits. UL, CSA Recognized. Max. voltage: 16, Max. current: 100.

Cat. No.	I _H * (A)	I _T (A)	V _{max.} (VDC)	I _{max} ** (A)	R _{1max.} (Ω)	Net Price
RGEF300	3.0	5.1	16	100	0.0980	\$.44
RGEF400	4.0	6.6	16	100	0.0600	\$.46
RGEF500	5.0	8.5	16	100	0.0340	\$.50
RGEF600	6.0	10.2	16	100	0.0280	\$.53
RGEF700	7.0	11.9	16	100	0.0220	\$.55
RGEF800	8.0	13.6	16	100	0.0175	\$.60
RGEF900	9.0	15.3	16	100	0.0135	\$.61
RGEF1000	10.0	17.0	16	100	0.0102	\$.63
RGEF1100	11.0	18.7	16	100	0.0089	\$.66
RGEF1200	12.0	20.4	16	100	0.0086	\$.76
RGEF1400	14.0	23.8	6	100	0.0064	\$.88

* Hold current @25°C. ** Device may withstand higher interrupt current at lower voltages. Each application will need to be individually evaluated.



RHEF 050, 100, 200



RHEF 070



RHEF 400-1500

POLYSWITCH RADIAL-LEAD RHEF SERIES

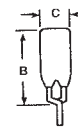
The RHEF series devices offer a high operating temperature (up to 125°C) and the broadest range of hold currents available in the radial-leaded form factor (70mA to 15A). The RHEF series devices can also be advantageous for use in standard operating temperatures of up to 85°C because they have a flatter thermal derating curve than other radial-leaded devices. Over the same temperature range, the trip-to-hold ratio is lower for an RHEF device compared with other PPTC devices.

Cat. No.	I _H * (A)	I _T (A)	V _{max.} (VDC)	I _{max} ** (A)	R _{1max.} (Ω)	Net Price
30V						
RHEF050	0.5	0.92	30	40	1.1	\$.38
RHEF070	0.7	1.4	30	40	0.8	\$.40
RHEF100	1.0	1.8	30	40	0.43	\$.40
16V						
RHEF200	2.0	3.8	16	100	0.110	\$.46
RHEF400	4.0	7.0	16	100	0.044	\$.51
RHEF450	5.0	7.8	16	100	0.054	\$.54
RHEF600	6.0	10.8	16	100	0.032	\$.59
RHEF650	6.5	12.0	16	100	0.026	\$.60
RHEF750	7.5	13.1	16	100	0.022	\$.63
RHEF900	9.0	16.5	16	100	0.017	\$.69
RHEF1000	10.0	18.5	16	100	0.015	\$.78
RHEF1300	13.0	24.0	16	100	0.010	\$.90
RHEF1500	15.0	28.0	16	100	0.0092	1.00

* Hold current @ 25°C. ** Device may withstand high interrupt current at lower voltages. Each application will need to be individually evaluated.



TR SERIES



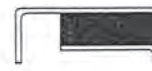
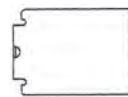
TRF SERIES

POLYSWITCH TR SERIES

This family uses a new geometry to build high voltage (250V-600V) products for telecommunications applications. **APPLICATIONS:** PBX and key telephone systems. Point-of-sale terminals. Customer premise equipment. Modems. T1/1SDN. UL1459. UL Recognized.

Cat. No.	Max. Voltage	Rated Current (20°C)			R _{max} Initial (ohms)	Dimensions (inches)			Net Price
		(amps)		Max. Current		A	B	C	
		Hold	Trip						
TR250-180U*	250	.180	.450	10	2.0	.41	.26	.14	\$.68
TR250-120	250	.120	.300	3	8.0	.25	.25	.18	\$.57
TR250-145-X	250	.145	.360	3	6.0	.25	.25	.18	1.04
TR600-150-X	600	.150	.375	3	12.0	.53	.35	.23	1.46
TR600-160-X	600	.160	.400	3	10.0	.63	.39	.23	1.34
LEAD FREE									
TRF250-180U*	250	.180	.450	10	2.0	.41	.26	.14	\$.68
TRF600-150	600	.150	.375	3	12.0	.53	.35	.23	\$.88

*Unencapsulated.



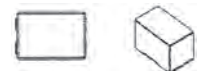
TS250-130F



TSL250-080F



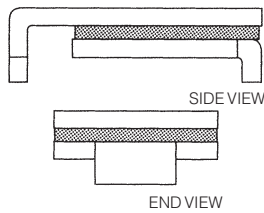
TS600-170F



TSM600-250F

POLYSWITCH SURFACE MOUNT DEVICE TELECOM AND BROADBAND PRODUCTS

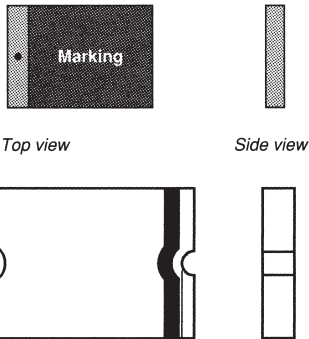
Cat. No.	I _H (A)	I _T (A)	V _{max.} Operating (VDC)	V _{max} Interrupt (V _{rms})	Net Price
TS250-130F	0.130	0.260	60	250 (650)	\$.84
TS600-170F	0.170	0.400	60	600	1.22
TSL250-080F	0.080	0.160	80	250	\$.82
TSM600-250F	0.250	0.860	250	600	2.16



POLYSWITCH SURFACE MOUNT DEVICE

This product line is designed for surface mount applications. The products range in hold currents from 0.3 amp to 2.5 amps and voltages from 15 volts to 60 volts. These devices are ideally suited for high-density board applications in computer and computer peripheral products, telecommunications, and general electronics applications. They are designed to be reflowed onto a printed circuit board using standard surface-mount processes. **APPLICATIONS:** Computers and peripherals. Local area networks. Ethernet cards. Hard disk drives. Printers. PCMCIA adapter cards. UL, CSA, TUV Recognized.

Cat. No.	I _H (A)	I _T (A)	V max. (VDC)	I max (A)	R _{min} (Ω)	R ₁ max. (Ω)	Net Price
SMD030F	0.30	0.60	60	10	1.20	4.800	\$.51
SMD050F	0.50	1.00	60	10	0.350	1.400	.51
SMD075F	0.75	1.50	30	40	0.350	1.000	.51
SMD075F/60	0.75	1.50	60	10	0.350	1.000	.51
SMD100F	1.10	2.20	30	40	0.125	0.480	.51
SMD100F/33	1.10	2.20	33	40	0.120	0.410	.51
SMD125F	1.25	2.50	15	40	0.070	0.250	.51
SMD260F	2.60	5.20	6	40	0.025	0.075	.53
SMD300F	3.00	6.00	6	40	0.015	0.048	.53



SURFACE MOUNT DEVICES FOR ELECTRONIC APPLICATIONS

These product lines are designed for surface-mount applications. The variety of sizes enables installation in limited space applications such as crowded printed circuit boards, digital cameras, PC cards, subnotebook computers, computer peripheral equipment, and general electronics. These devices are designed for applications where such space is constrained and resettable circuit protection is desired.

Cat. No.	I _H (A)	I _T (A)	V max. (VDC)	I max (A)	R _{min} (Ω)	R ₁ max. (Ω)	Net Price
NANOSMDC SERIES—SIZE: 3216 MM, 1206 MILS							
NANOSMDC020F	0.20	0.42	24	100	0.65	2.60	\$.38
NANOSMDC050F/13.2	0.50	1.10	13.2	100	0.20	0.80	.38
NANOSMDC075F	0.75	1.50	6	100	0.12	0.40	.38
NANOSMDC110F	1.10	2.20	6	100	0.07	0.20	.38
NANOSMDC150F	1.50	3.00	6	100	0.04	0.11	.38
MICROSMDC SERIES—SIZE: 3225 MM, 1210 MILS							
MICROSMDC005F	0.05	0.15	30	10	3.6	50.0	.40
MICROSMDC010F	0.10	0.25	30	10	2.10	15.00	.40
MICROSMDC035F	0.35	0.75	6	40	0.32	1.30	.40
MICROSMDC050F	0.50	1.00	13.2	40	0.25	0.90	.40
MICROSMDC075F	0.75	1.50	6	40	0.11	0.40	.40
MICROSMDC110F	1.10	2.20	6	40	0.07	0.21	.40
MICROSMDC150F	1.50	3.00	6	40	0.04	0.11	.40
MINISMD SERIES—SIZE: 4532 MM, 1812 MILS							
MINISMD014F	0.14	0.34	60	10	1.500	6.000	.39
MINISMD020F	0.20	0.40	30	10	0.600	3.300	.38
MINISMD050F	0.50	1.00	24	100	0.150	1.000	.38
MINISMD075F-2	0.75	1.50	13.2	100	0.110	0.450	.39
MINISMD110F-2	1.10	2.20	8	100	0.040	0.210	.32
MINISMD125F-2	1.25	2.50	6	100	0.040	0.140	.40
MINISMD125F/16-2	1.25	2.50	16	100	0.040	0.140	.44
MINISMD150F-2	1.50	3.00	6	100	0.040	0.110	.39
MINISMD200F	2.00	4.00	8	100	0.020	0.070	.43
MINISMD260F-2	2.60	5.00	6	100	0.015	0.043	.43
MINISMD260F/12	2.60	5.00	12	100	0.015	0.047	.49



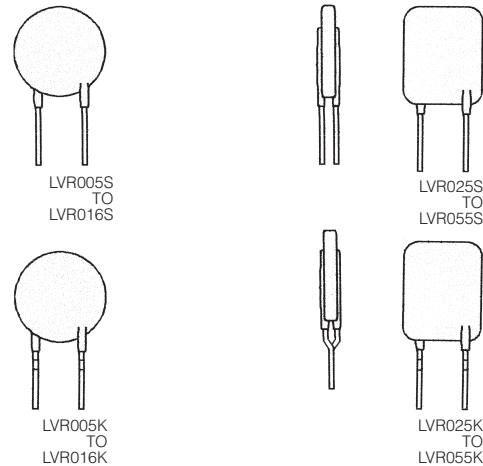
RAYCHEM OVERCURRENT FUSES

The lightning robust surface-mount fuse offers overcurrent protection from power faults. Small footprint and low resistance. Low profile. When combined with a SiBar™ overvoltage protection device, assists equipment in meeting regulatory standards with no additional series components. Improved temperature rise performance over other similar SMT fuse devices under sneak current testing. High density placement in multi-port system designs. Size: 10.5mm L x 3.4mm W x 3.4mm H. **APPLICATIONS:** xDSL and ADSL linecards and modems. T1/E1 systems. Twisted pair telecom ports requiring Telcordia GR-1089, UL60950 and FCC Part 68 compliance.

Cat. No.	Amp Rating (A)	Voltage Rating (V)	Typical Resistance (Ω)	Typical I ² t (A ² s)*	Net Price
FT600-0500	0.50	250	0.5	1	\$.61
FT600-1250	1.25	250	0.1	16	.61
FT600-2000	2.00	250	0.05	18	.61

NOTE: The FTXXXX devices are designed to carry 100% of rated current for 4 hours minimum and 250% of rated current for 1 second minimum, 120 seconds maximum. Resistance measured at 10% of rated current.

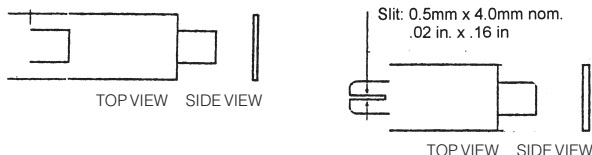
*I²t is calculated at 10ms or less.



POLYSWITCH RESETTABLE PROTECTION DEVICES

The LVR series is the first Polyswitch device family designed for use at line voltages of 120VAC to 240VAC. They may be used to help provide primary side protection of chargers, power supplies, and control transformers in many industrial, commercial and consumer applications. They are also appropriate to help protect many 120VAC or 240VAC motors.

Cat. No.	I _H (A)	I _T (A)	V max. (VAC)	I max 135VAC/240VAC (A)	R ₁ max. (Ω)	Net Price
STRAIGHT LEADS						
LVR005S	0.05	0.12	240	20/1.0	65.0	\$.42
LVR008S	0.08	0.19	240	20/1.2	26.0	.42
LVR012S	0.12	0.30	240	20/1.2	12.0	.42
LVR016S	0.16	0.37	240	20/2.0	7.8	.44
LVR025S	0.25	0.56	240	20/3.5	3.8	.49
LVR033S	0.33	0.74	240	20/4.5	1.24	.54
LVR040S	0.40	0.90	240	20/5.5	1.9	.56
LVR055S	0.55	1.25	240	20/5.5	1.45	.59
KINKED LEADS						
LVR005K	0.05	0.12	240	20/1.0	65.0	.42
LVR008K	0.08	0.19	240	20/1.2	26.0	.42
LVR012K	0.12	0.30	240	20/1.2	12.0	.42
LVR016K	0.16	0.37	240	20/2.0	7.8	.44
LVR025K	0.25	0.56	240	20/3.5	3.8	.49
LVR033K	0.33	0.74	240	20/4.5	1.24	.54
LVR040K	0.40	0.90	240	20/5.5	1.9	.56
LVR055K	0.55	1.25	240	20/5.5	1.45	.59



DEVICES FOR BATTERY PACK APPLICATIONS

LTP devices provide reliable, noncycling protection for rechargeable batteries. LTP devices also offer additional protection at elevated temperatures.

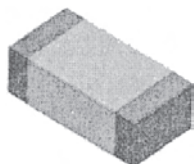
Cat. No.	I _v * (A)	I _T (A)	V _{max} (VDC)	I _{max} (A)	R _{max} Initial (Ω)	Net Price
LTP070SF	0.7	1.45	15	100	0.200	\$.52
LTP100F	1.0	2.5	24	100	0.130	.51
LTP180F	1.8	3.8	24	100	0.068	.53
LTP190F	1.9	4.2	24	100	0.057	.53

SIBAR THYRISTOR SURGE PROTECTION DEVICES

SiBar thyristor surge protectors are bi-directional silicon devices that fold back in the presence of transient overvoltage faults. When the breakover voltage of a SiBar device is exceeded, the device switches from high to low impedance to protect sensitive downstream equipment from harmful voltage surges. The device remains latched in a low impedance state until current decreases below the hold current, at which point the device returns to its high-impedance state. SiBar devices may be used in conjunction with PolySwitch® resettable fuses in telecommunications applications, including network equipment, customer premise equipment, and primary protectors. Meets the stringent requirements of FCC part 68, UL1459/UL1950 3rd Edition, UL497A, and ITU-T Recommendation K.21.

Cat. No.	V _{DM} ¹ max. (V)	V _{BO} ² max. (V)	I _H min. (mA)	V _T ³ max. (V)	C _T ⁴ Typ (pF)	Net Price
TVB170SA-L	270	265	150	4.0	20	\$.37
TVB270SA-L	270	365	150	4.0	20	.37
TVB270SB-L	270	365	150	4.0	25	.51
TVB170SC-L	170	265	150	4.0	50	.66
TVB270SC-L	270	365	150	4.0	50	.66

NOTES: All electrical characteristics are measured at 25°C. ¹ V_{DM} measured per UL497B pulse requirements; max. off-state leakage current (I_{DM}) = 5µA. ² Measured at a typical breakover current (I_{BO}) = 230mA. ³ C, measures at f = 1MHz, 50-V_{DC} bias, 1 V_{RMS}. ⁴ Peak on-state surge current (60Hz, one cycle).



RAYCHEM PESD PROTECTION DEVICES

The Raychem PESD protection devices provide exceptionally low capacitance, and they perform better than other comparable components in transmission line pulse (TLP) testing, as well as IEC61000-4-2 testing, especially after Multiple hits (up to 1000). The devices offer a lower trigger voltage and a lower clamping voltage than typical polymer ESD devices, resulting in improved protection of sensitive electronic components.

Cat. No.	V _{DC} V	V _{T(IEC)} V	V _{C(IEC)} V	C _P pF	I _{L(TYP)} µA	I _{L(max)} µA	Net Price
PESD0402-060	6	150	25	0.25	<0.001	0.05	\$.17
PESD0603-140	14	350	30	0.25	<0.001	0.01	.13

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