

SM4933 THRU SM4937

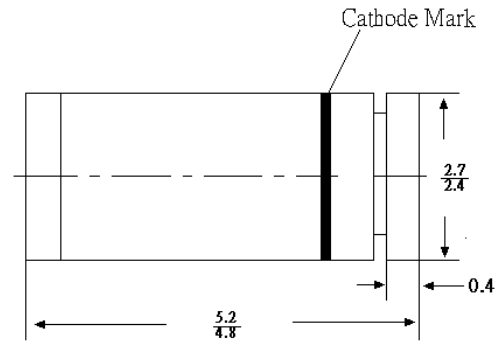
FAST RECOVERY SILICON RECTIFIERS SURFACE MOUNT GLASS PASSIVATED

Reverse Voltage – 50 to 600 Volts

Forward Current – 1.0 Ampere

Features

- Fast switching
- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- Mounting position: Any



MELF

Dimensions in mm

Mechanical Data

- Epoxy: Device has UL flammability classification 94V-0

Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz. resistive or inductive load. For capacitive load, derate current by 20%.

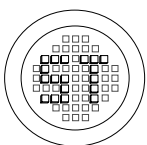
	Symbols	SM4933	SM4934	SM4935	SM4936	SM4937	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{CD}	50	100	200	400	600	Volts
Maximum average forward rectified current $T_A = 55^\circ\text{C}$	I_O	1					Amp
Peak forward surge current I_{FM} (surge): 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30					Amps
Maximum forward voltage at 1A DC	V_F	1.2					Volts
Maximum full load reverse current, Full cycle average at $T_A = 55^\circ\text{C}$	I_R	50					μA
Maximum average reverse current at rated DC blocking voltage		5					
		100					
Maximum reverse recovery time (Note 4)	T_{rr}	200					nS
Typical junction capacitance (Note 1)	C_J	15					pF
Maximum thermal resistance	(Note 2) $R_{\theta JA}$ (Note 3) $R_{\theta JL}$	30 75					$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_S	-65 to +175					$^\circ\text{C}$

Notes: (1) Measured at 1MHz and applied reverse voltage of 4V DC.

(2) Thermal resistance junction to terminal 6mm² copper pads to each terminal.

(3) Thermal resistance from junction to ambient 6mm² copper pads to each terminal.

(4) Test conditions: $I_F = 1\text{A}$, $V_R = 30\text{V}$.



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO 14001 Certificate No. 7116
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