



CHENMKO ENTERPRISE CO.,LTD

FSM4933PT

THRU

FSM4937PT

SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY SILICON RECTIFIER

VOLTAGE RANGE 50 - 600 Volts CURRENT 1.0 Ampere

Lead free devices

FEATURES

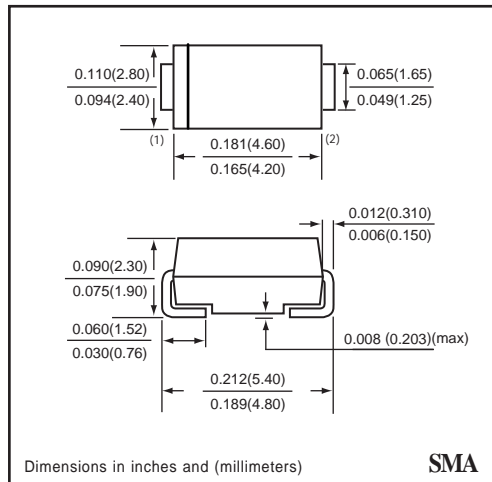
- * Low leakage current
- * Ideal for surface mounted applications
- * Metallurgically bonded construction
- * Fast recovery times for high efficiency
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Glass passivated junction
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMA molded plastic
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Indicated by cathode band
Weight: 0.002 ounces, 0.064 gram



SMA



Dimensions in inches and (millimeters)

SMA

MAXIMUM RATINGS AND ELECTRICAL 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%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS		SYMBOL	FSM4933PT	FSM4934PT	FSM4935PT	FSM4936PT	FSM4937PT	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	Volts
Maximum RMS Voltage		VRMS	35	70	140	280	420	Volts
Maximum DC Blocking Voltage		Vdc	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current TL = 100°C		Io	1.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	30					Amps
Typical Junction Capacitance (Note 1)		CJ	15					pF
Maximum Thermal Resistance	(Note 2)	R θJL	30					°C / W
	(Note 3)	R θJA	75					°C / W
Operating and Storage Temperature Range		TJ, TSTG	-65 to +150					°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	FSM4933PT	FSM4934PT	FSM4935PT	FSM4936PT	FSM4937PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		VF	1.2					Volts
Maximum Full Load Reverse Current, Full cycle Average at 55°C Ambient			50					uAmps
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	IR	5.0					uAmps
	@ TA = 125°C		100					
Maximum Reverse Recovery Time (Note 4)		trr	200					nSec

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Thermal Resistance Junction to terminal, 6.0 mm² copper pads to each terminal
 3. Thermal Resistance Junction to ambient, 6.0 mm² copper pads to each terminal
 4. Test Conditions : IF = 1.0 A, VR = -30 V.

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RATING CHARACTERISTIC CURVES (FSM4933PT THRU FSM4937PT)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

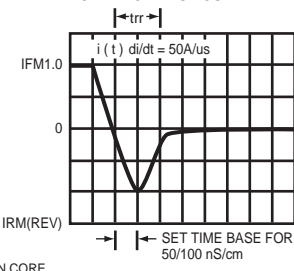
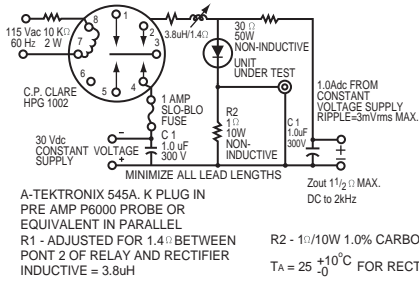


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

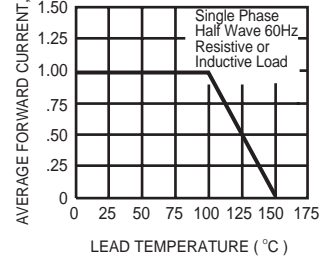


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

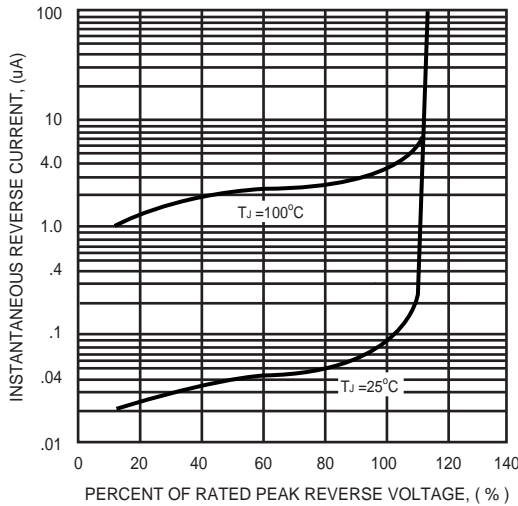


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

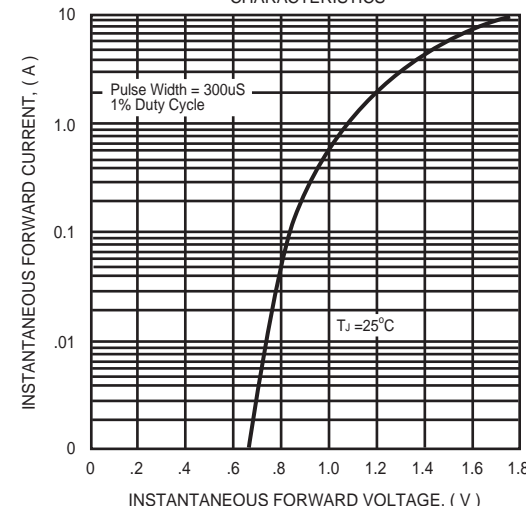


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

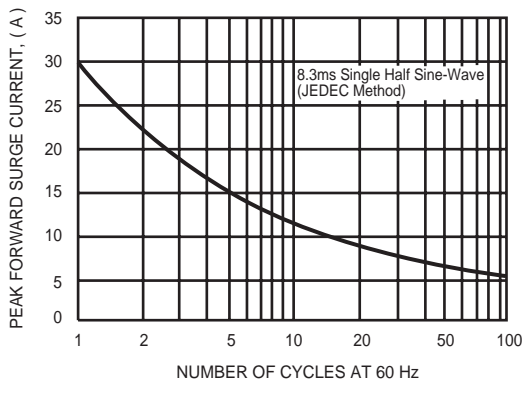


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

