CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT GLASS PASSIVATED

FAST RECOVERY SILICON RECTIFIER

VOLTAGE RANGE 400 - 1000 Volts CURRENT 1.0 Ampere

FSM157PT

THRU

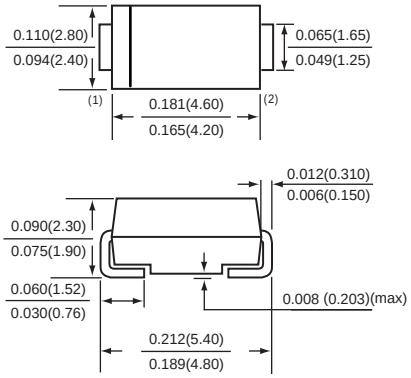
FSM159PT

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

SMA



Dimensions in inches and (millimeters)

SMA

MECHANICAL DATA

Case: JEDEC SMA molded plastic
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.002 ounce 0.064 gram

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 RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	FSM157PT	FSM158PT	FSM159PT	UNITS
Peak Recurrent and Non Recurrent Reverse Voltage	V_{RRM}	400	600	1000	Volts
Forward current, R load at Temperatur T_L = 100°C	$I_{F(AV)}$	1.0			Amps
Recurrent Peak Forward Current	I_{FRM}	9.0			Amps
10 ms. Peak Forward Surge Current	I_{FSM}	35			Amps
Maximum Operating Temperature	T_J	+150			°C
Storage Temperature Range	T_{STG}	-65 to +150			°C

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

CHARACTERISTICS	SYMBOL	FSM157PT	FSM158PT	FSM159PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V_F	1.3			Volts
Reverse current at V_{RRM} at 25°C	I_R	5.0			uA
Capacitance at 1 MHz and V_{RRM}	C_D	2.2	2.0	1.8	pF
Maximum Thermal Resistance	$R_{\theta JA}$	60			°C / W
Maximum Reverse Recovery Time From I_F=0.5A to I_R= -1A with I_{RR}= -0.25A	trr	150		250	nS

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RATING CHARACTERISTIC CURVES (FSM157PT THRU FSM159PT)

FIG. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

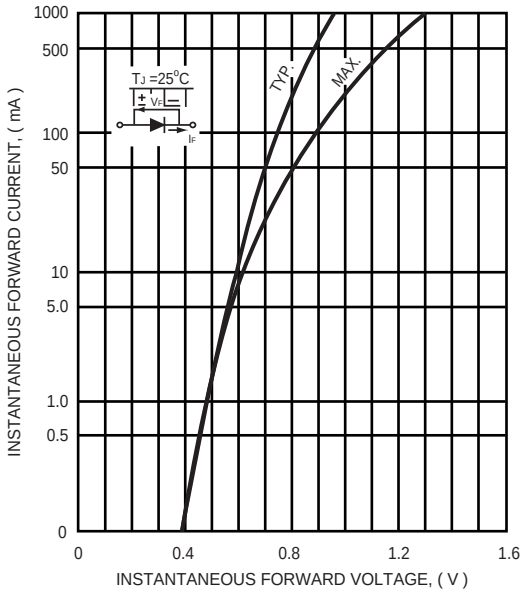

FIG. 2 - TYPICAL THERMAL RESISTANCE CHARACTERISTICS

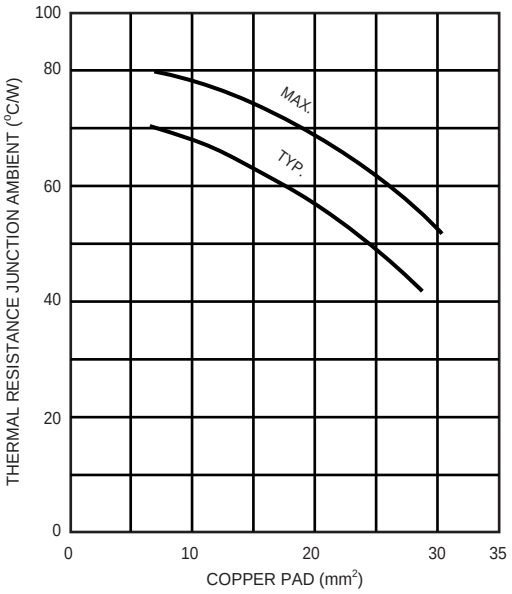

FIG. 3 - TYPICAL FORWARD CURRENT DERATING CURVE

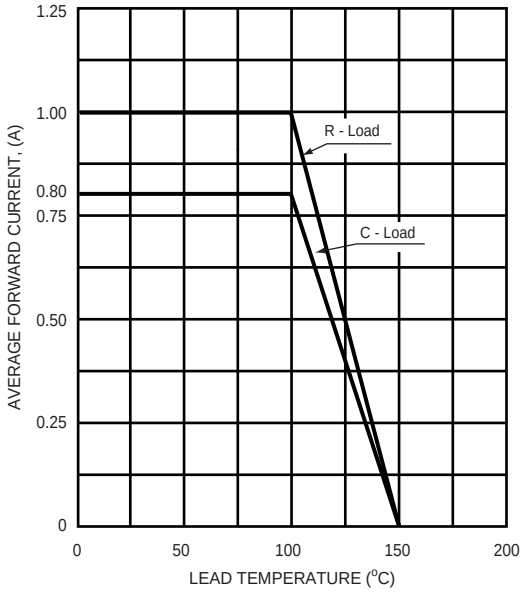

FIG. 4 - TYPICAL JUNCTION CAPACITANCE