



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY SILICON RECTIFIER

VOLTAGE RANGE 400 - 1000 Volts CURRENT 1.0 Ampere

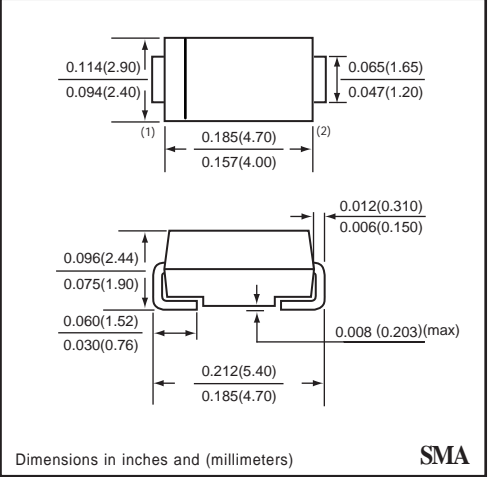
**FSM157GP  
THRU  
FSM159GP**

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

RATINGS	SYMBOL	FSM157GP	FSM158GP	FSM159GP	UNITS
Peak Recurrent and Non Recurrent Reverse Voltage	VRRM	400	600	1000	Volts
Forward current, R load at Temperatur TL = 100°C	IF (AV)	1.0			Amps
Recurrent Peak Forward Current	IFRM	9.0			Amps
10 ms. Peak Forward Surge Current	IFSM	35			Amps
Maximum Operating Temperature	TJ	+150			°C
Storage Temperature Range	TSTG	-65 to +150			°C

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

CHARACTERISTICS	SYMBOL	FSM157GP	FSM158GP	FSM159GP	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	VF	1.3			Volts
Reverse current at VRRM at 25°C	IR	5.0			uA
Capacitance at 1 MHz and VRRM	Cd	2.2	2.0	1.8	pF
Maximum Thermal Resistance	R θJA	60			°C / W
Maximum Reverse Recovery Time From IF=0.5A to IR= -1A with IRR= -0.25A	trr	150		250	nS

# RATING CHARACTERISTIC CURVES ( FSM157GP THRU FSM159GP )

FIG. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

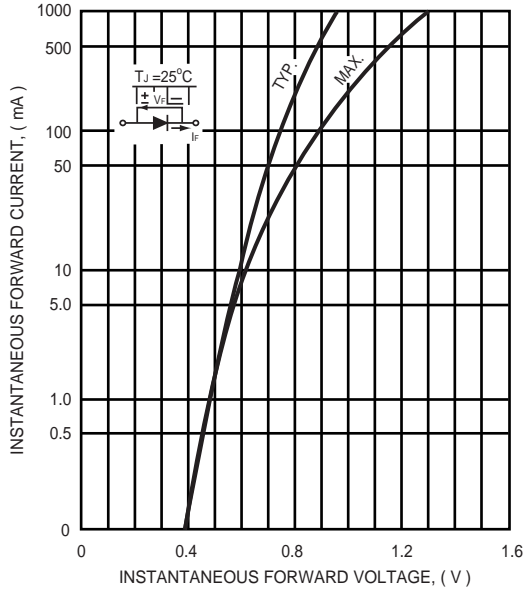


FIG. 2 - TYPICAL THERMAL RESISTANCE CHARACTERISTICS

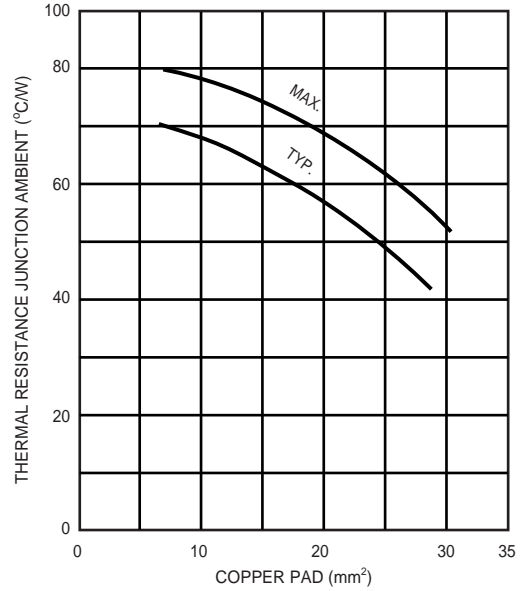


FIG. 3 - TYPICAL FORWARD CURRENT DERATING CURVE

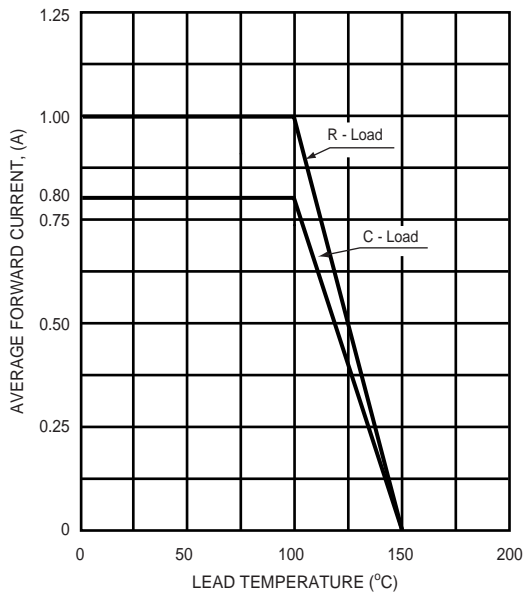


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

