



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 150 Volts CURRENT 1.0 Ampere

SMD115EGP

FEATURES

- * For surface mounted applications
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * High surge capability
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Lead free devices

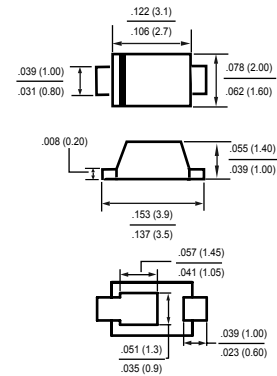
MARKING

* E5

CIRCUIT



SOD-123E



Dimensions in inches and (millimeters)

SOD-123E

MAXIMUM RATINGS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	SMD115EGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	Volts
Maximum RMS Voltage	V_{RMS}	105	Volts
Maximum DC Blocking Voltage	V_{DC}	150	Volts
Maximum Average Forward Rectified Current	I_O	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	Amps
Typical Junction Capacitance (Note 2)	C_J	85	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	20	$^{\circ}\text{C} / \text{W}$
Operating Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	SMD115EGP	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V_F	0.85	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	100	μAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

2013-11

RATING CHARACTERISTIC CURVES (SMD115EGP)

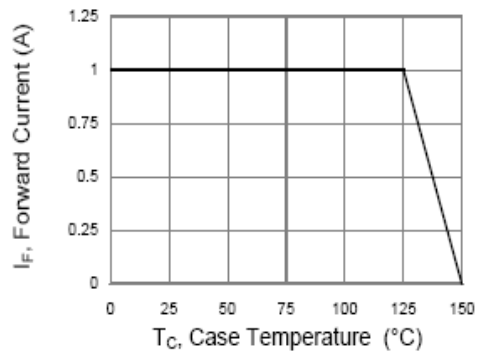


Fig.1 Forward Current Derating Curve

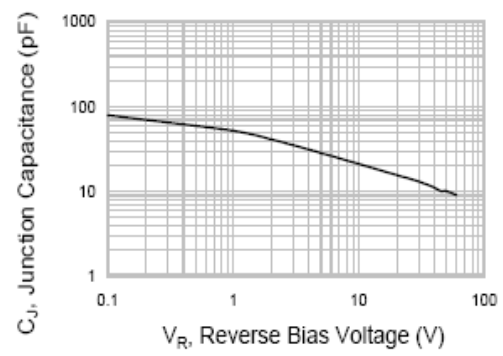


Fig.2 Typical Junction Capacitance

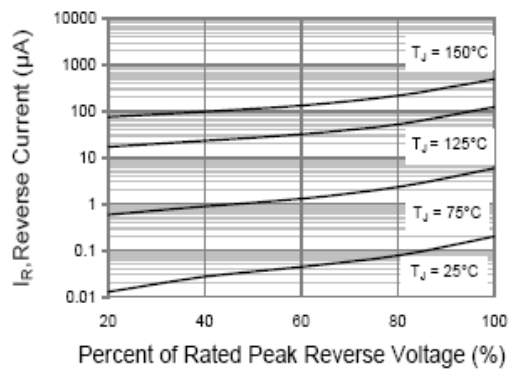


Fig.3 Typical Reverse Characteristics

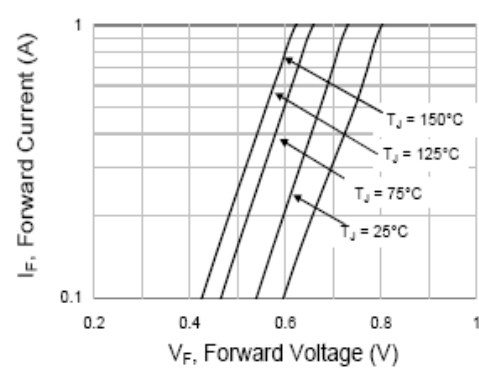


Fig.4 Typical Forward Characteristics