CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 100 Volts CURRENT 1.0 Ampere

SMD110AGP

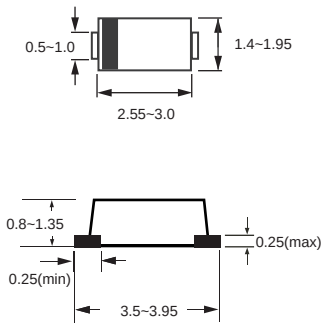
FEATURES

* 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

* 110

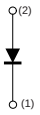
SOD-123S



Dimensions in millimeters

SOD-123S

CIRCUIT



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

RATINGS	SYMBOL	SMD110AGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	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}	40	Amps
Typical Junction Capacitance (Note 2)	C_J	110	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	60	°C / W
Operating Temperature Range	T_J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

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

CHARACTERISTICS		SYMBOL	SMD110AGP	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		V_F	0.8	Volts
Maximum Average Reverse Current	@ T_A = 25°C	I_R	50	uAmps
at Rated DC Blocking Voltage	@ T_A = 100°C		10	mAmps

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.

2007-06

RATING CHARACTERISTIC CURVES (SMD110AGP)

FIG. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

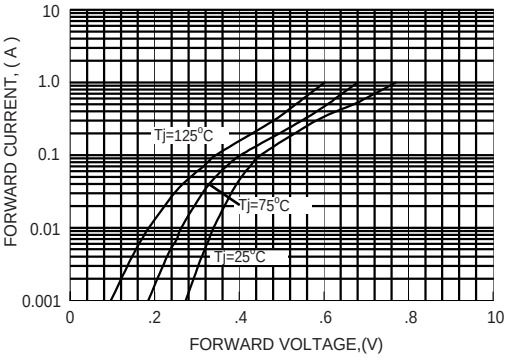


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

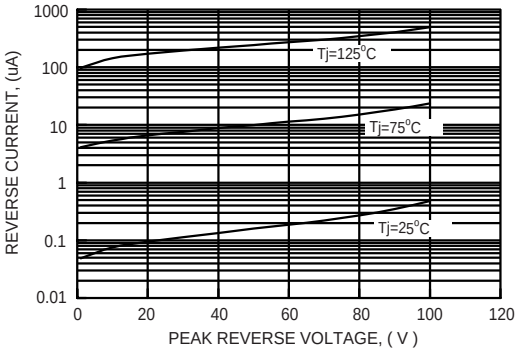


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

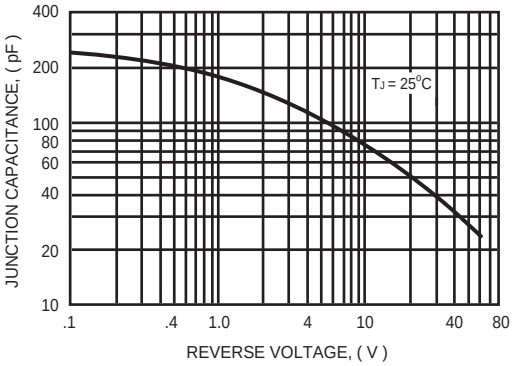
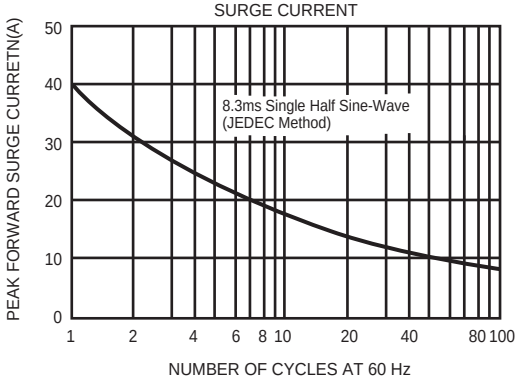



FIG. 4 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT