



CHENMKO ENTERPRISE CO.,LTD

SLM5817PT

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 Volts CURRENT 1.0 Ampere

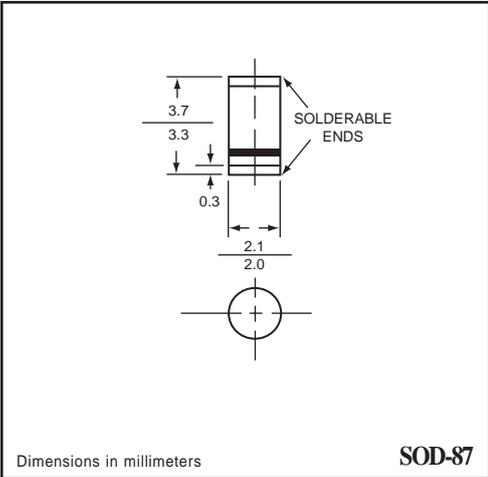
Lead free devices

FEATURES

- * Hermetically sealed glass SMD package
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SOD-87 molded plastic
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.0015 ounce 0.048 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	SLM5817PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	Volts
Maximum RMS Voltage	VRMS	14	Volts
Maximum DC Blocking Voltage	VDC	20	Volts
Maximum Average Forward Rectified Current at 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	25	Amps
Typic Junction Capacitance (Note 2)	CJ	70	pF
Typical Thermal Resistance (Note 1)	R #JA	150	°C / W
Storage and Operating Temperature Range	TJ, TSTG	-65 to +125	°C
Voltage Rate of Change (Note 3)	di/dt	1000	V/uSec

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

CHARACTERISTICS	SYMBOL	SLM5817PT	UNITS
Maximum Instantaneous Forward Voltage at TA = 25°C	@ IF=1.0A	0.450	Volts
	@ IF=3.0A	0.750	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	1	mAmps
	@ TJ = 100°C	10	mAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.06 X 0.06" (0.15X 0.15mm) copper pad area.
 2. Measured at 1.0 MHz and applied reverse voltage of 0 volt.
 3. dv/dt measured at rated reverse voltage.

2002-04

RATING CHARACTERISTIC CURVES (SLM5817PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

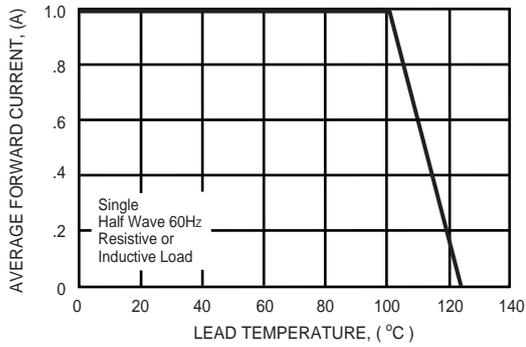


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

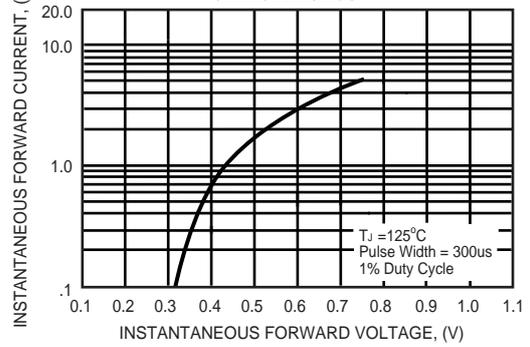


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

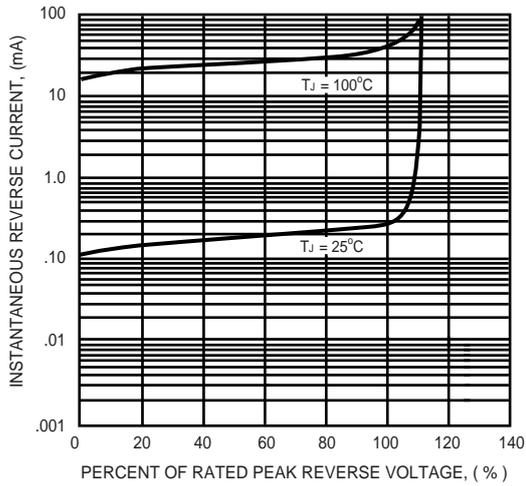


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

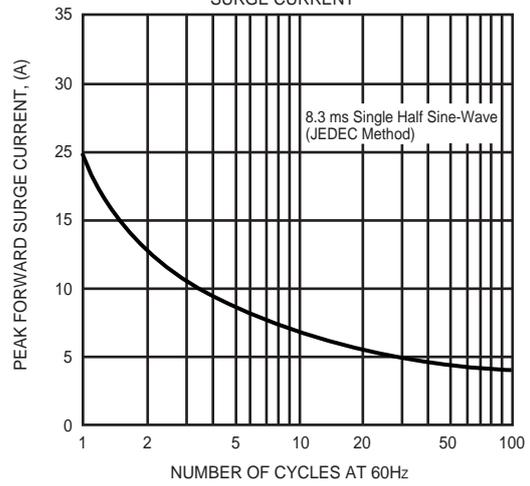


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

