

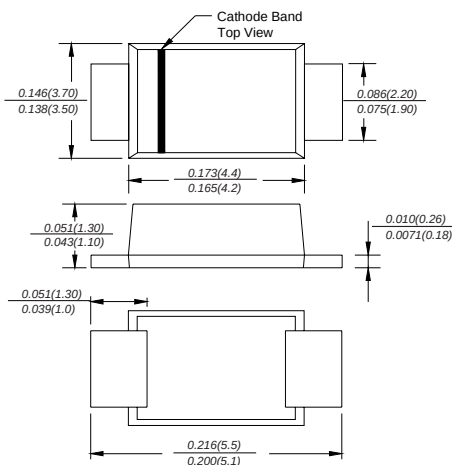


SL56BF

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 60 Volts Forward Current - 5.0 Ampere

SMBF



Dimensions in inches and (millimeters)

FEATURES

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

MECHANICAL DATA

Case: JEDEC SMBF molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any

Weight: 57mg/0.002oz

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	SL56BF	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	60	VOLTS
Maximum RMS voltage	V_{RMS}	42	VOLTS
Maximum DC blocking voltage	V_{DC}	60	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	5.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125	Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.55	Volts
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	1.0 50.0	mA
Typical junction capacitance (NOTE 1)	C_J	370	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	25	$^{\circ}C/W$
Operating junction temperature range	T_{JL}	-50 to +125	$^{\circ}C$
Storage temperature range	T_{STG}	-50 to +150	$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.5x0.5" (12.7x12.7mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES SL56BF

FIG.1-FORWARD CURRENT DERATING CURVE

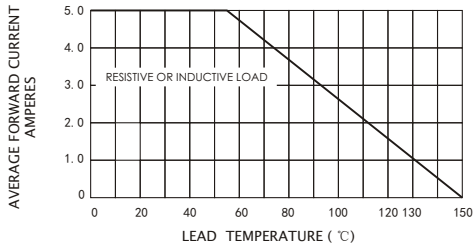


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

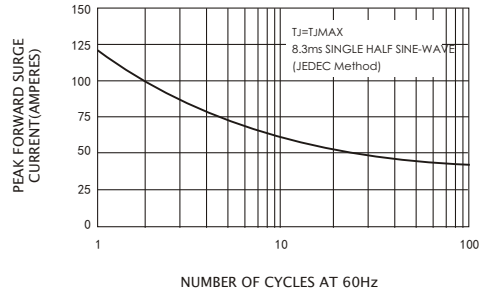


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

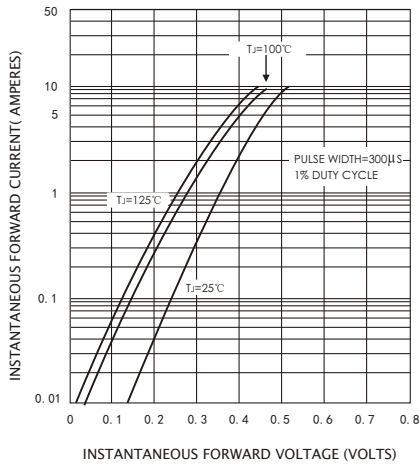


FIG.4-TYPICAL REVERSE CHARACTERISTICS

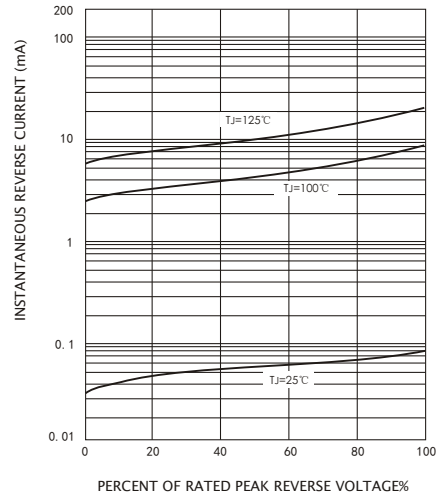
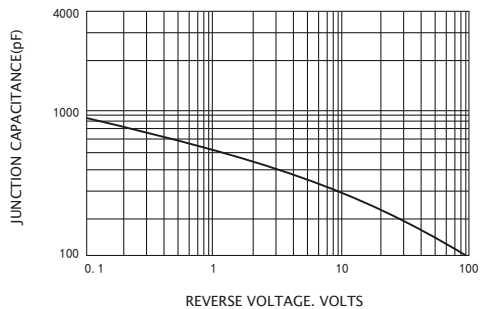


FIG.5-TYPICAL JUNCTION CAPACITANCE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

