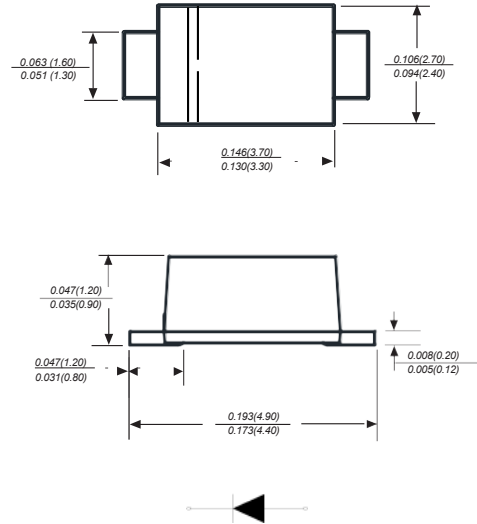


SURFACE MOUNT SCHOTTKY BARRIER DIODES

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 RoHS-compliant
- ◆ Ideal for printed circuit board
- ◆ Open Junction chip
- ◆ Low reverse leakage High forward surge current
- ◆ capability High temperature soldering guaranteed
- ◆ 250°C/10 seconds at terminals

SMAF



Dimensions in inches and (millimeters)

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%.

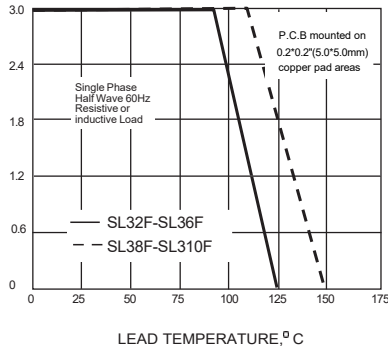
Parameter	SYMBOLS	SL32F	SL34F	SL36F	SL38F	SL310F	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	80	100	
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	V
Maximum DC blocking voltage	V _{DC}	20	40	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	I _(AV)	3.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	70					A
Maximum instantaneous forward voltage at 3.0A	V _F	0.45		0.5	0.7		V
Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =125℃	I _R	0.5 10.0			0.2 5.0		mA
Typical junction capacitance (NOTE 1)	C _J	500		300			pF
Typical thermal resistance (NOTE 2)	R _{θJA}	88.0					℃/W
Operating junction temperature range	T _J	-55 to +125			-55 to +150		℃
Storage temperature range	T _{STG}	-55 to +150					℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

Typical Characteristics

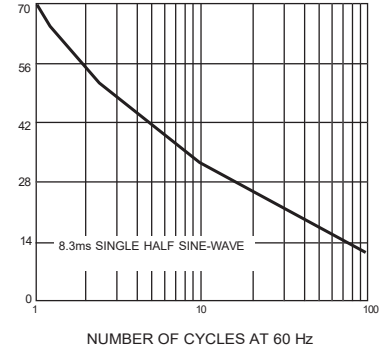
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



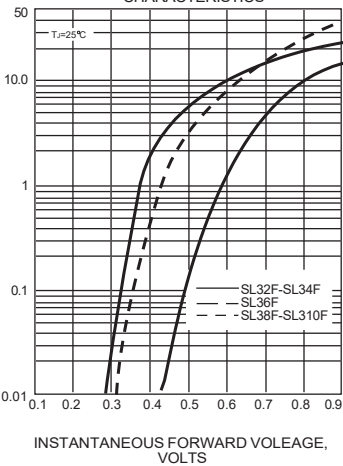
PEAK FORWARD SURGE CURRENT,
AMPERES

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



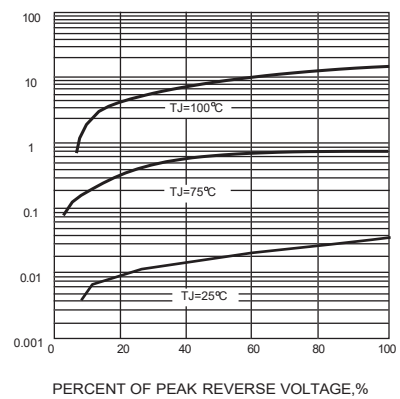
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



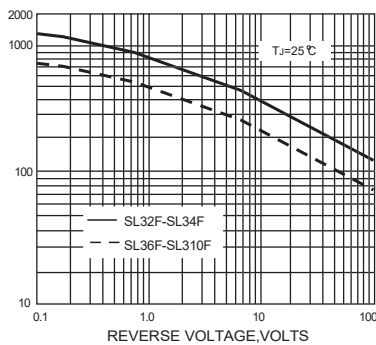
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



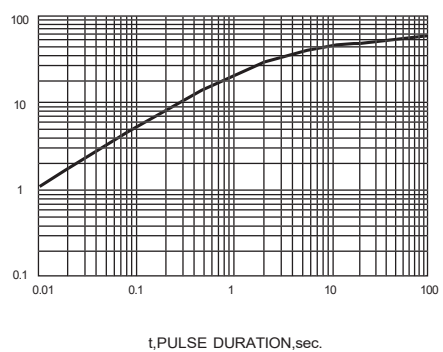
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.