



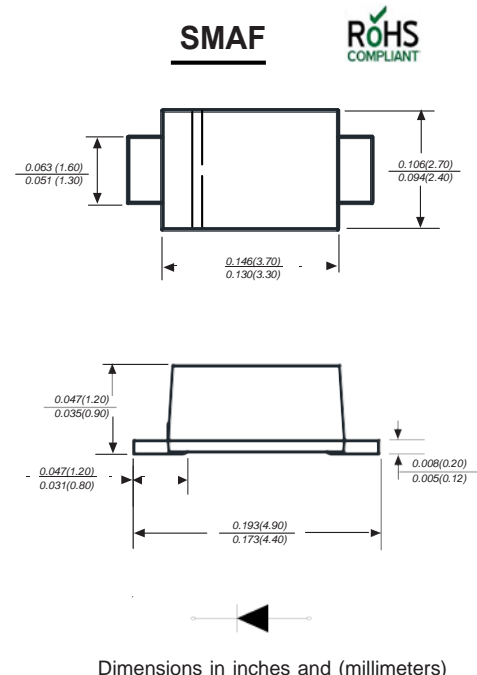
# SL32F THRU SL310F

Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Ampere

## SURFACE MOUNT SCHOTTKY BARRIER DIODES

### Features

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### Mechanical Data

- Case: UT Ø molded plastic body
- Terminals: Solderable per MIL-STD-750, Method 2026A
- Polarity: Polarity symbol marking on body
- Mounting Position: Any
- Weight: 0.0014 ounce, 0.038 grams

### 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%.

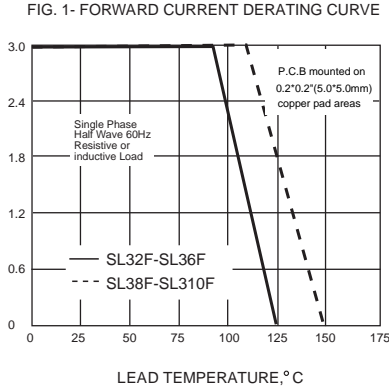
Parameter	SYMBOLS	MDD SL32F	MDD SL34F	MDD SL36F	MDD SL38F	MDD SL310F	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	40	60	80	100	
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	40	60	80	100	V
Maximum average forward rectified current 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 at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	0.5 10.0			0.2 5.0		mA
Typical junction capacitance (NOTE 1)	$C_J$	500		300			pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0					$^{\circ}C/W$
Operating junction temperature range	$T_J$	-55 to +125			-55 to +150		$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 to +150					$^{\circ}C$

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

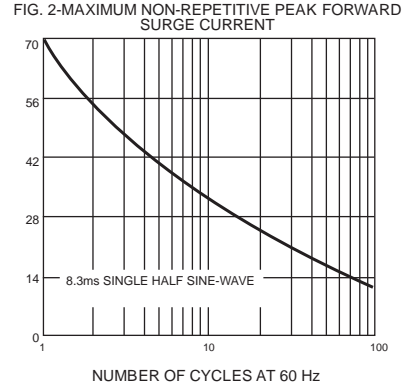


## Typical Characteristics

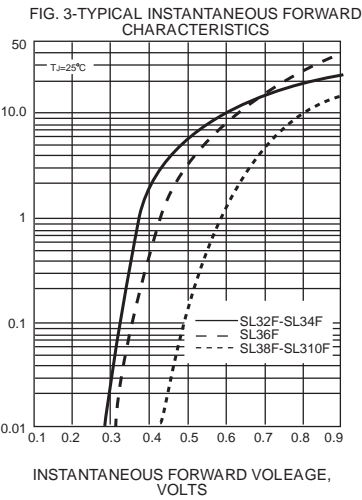
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



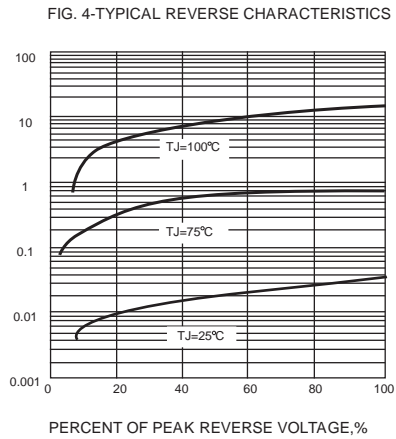
PEAK FORWARD SURGE CURRENT, AMPERES



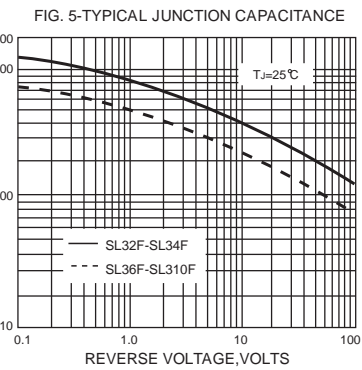
INSTANTANEOUS FORWARD CURRENT, AMPERES



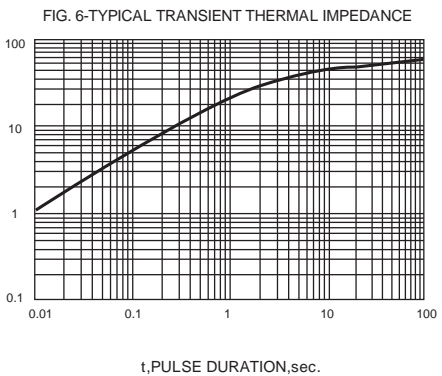
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W



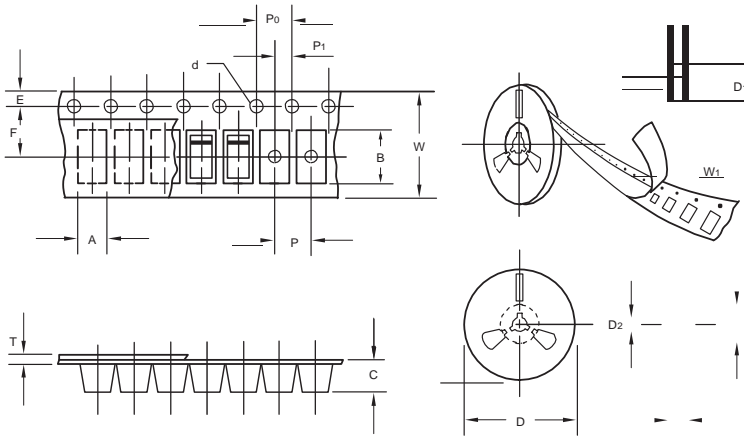
The curve above is for reference only.



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## Packing information



unit:mm

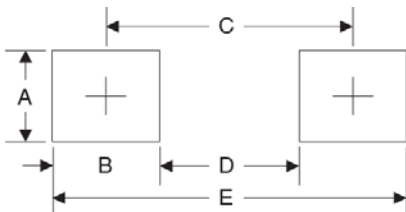
Item	Symbol	Tolerance	SMAF
Carrier width	A	0.1	2.80
Carrier length	B	0.1	4.75
Carrier depth	C	0.1	1.42
Sprocket hole	d	0.05	1.50
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D <sub>1</sub>	min	54.40
Feed hole diameter	D <sub>2</sub>	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.05
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P <sub>0</sub>	0.1	4.00
Embossment center	P <sub>1</sub>	0.1	2.00
Overall tape thickness	T	0.1	0.30
Tape width	W	0.3	8.00
Reel width	W <sub>1</sub>	1.0	12.30

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

## Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMAF	7"	3,000	4.0	6,000	210*208*203	178	400*265*400	120,000	10.0

## Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.8	0.071
B	1.6	0.063
C	3.8	0.150
D	2.2	0.087
E	5.4	0.213