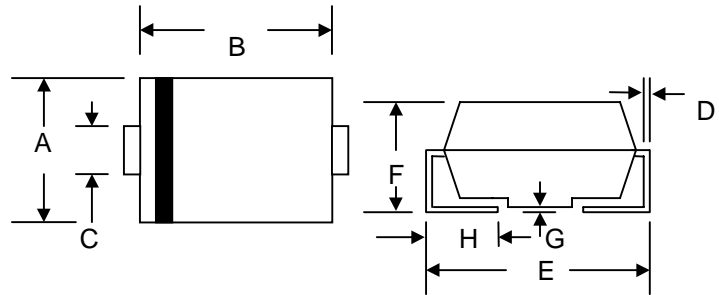


## 1.0A LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 30A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

SMA/DO-214AC		
Dim	Min	Max
A	2.50	2.90
B	4.00	4.60
C	1.40	1.60
D	0.152	0.305
E	4.80	5.28
F	2.00	2.44
G	0.051	0.203
H	0.76	1.52
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SL12	SL13	SL14	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	20	30	40	V
DC Blocking Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	$I_O$	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30			A
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	0.38	0.38	0.40	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	0.5 20			mA
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	88			K/W
Operating Temperature Range	$T_j$	-65 to +125			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150			$^\circ\text{C}$

Note: 1. Mounted on P.C. Board with  $5.0\text{mm}^2$  (0.13mm thick) copper pad areas

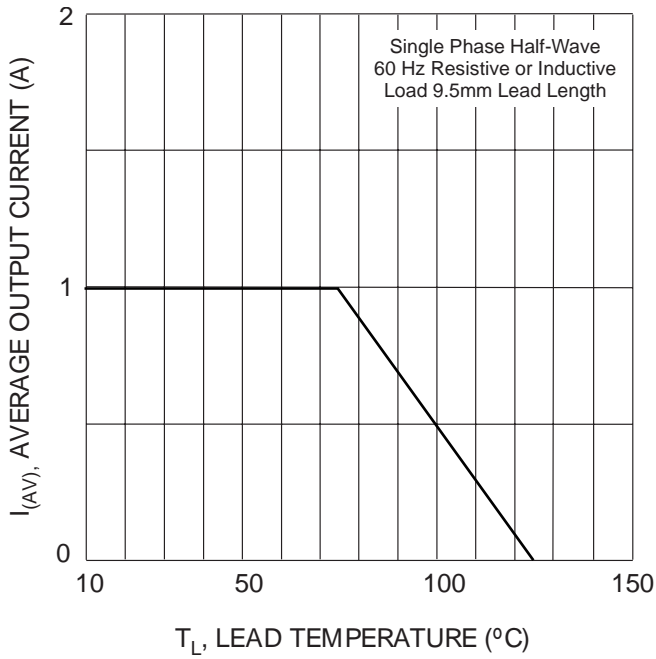


Fig. 1 Forward Current Derating Curve

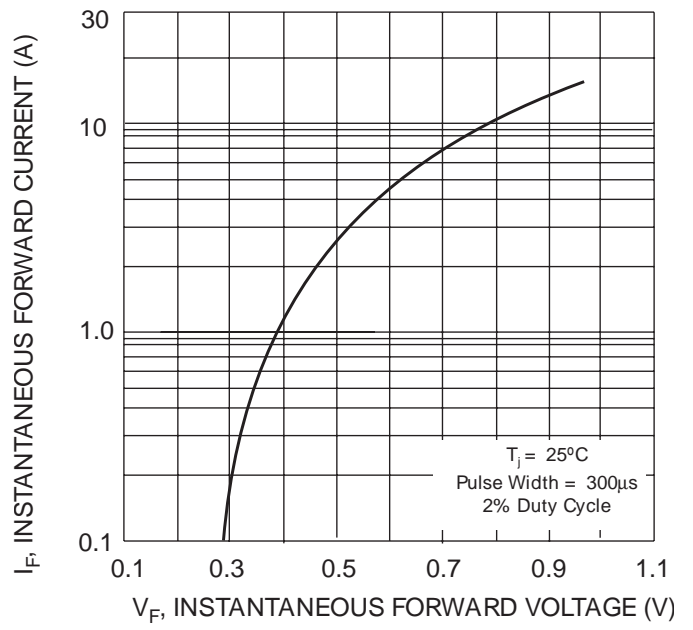


Fig. 2 Typical Forward Voltage Characteristics

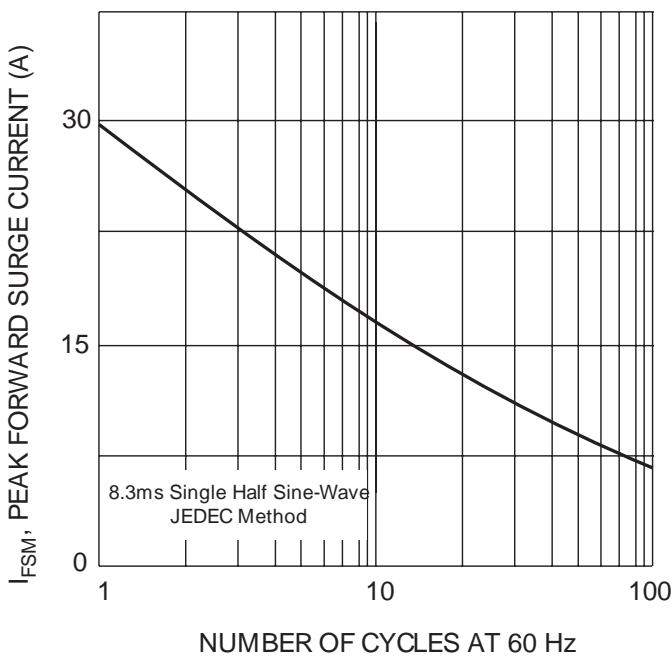


Fig. 3 Peak Forward Surge Current

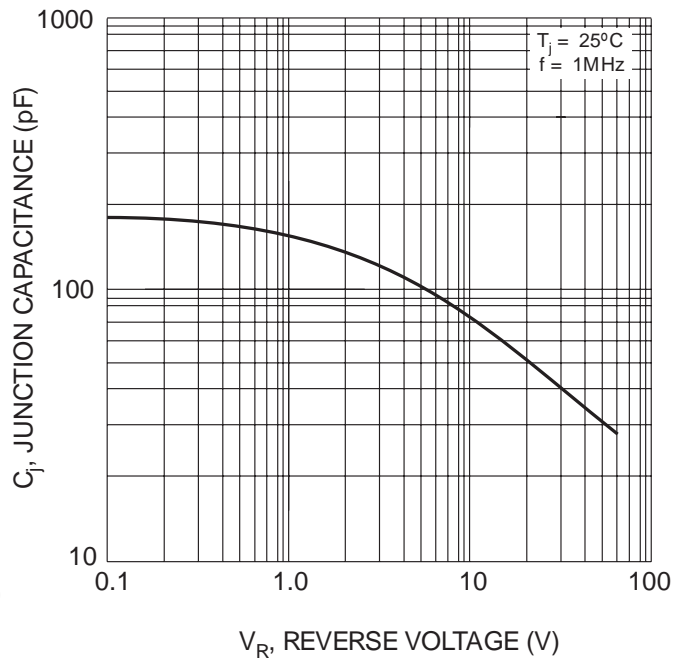


Fig. 4 Typical Junction Capacitance

## ORDERING INFORMATION

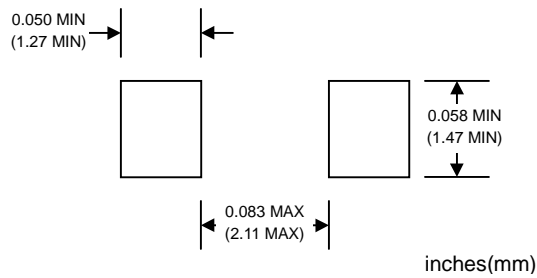
Product No. ♦	Package Type	Shipping Quantity
SL12-T1	SMA	1800/Tape & Reel
<b>SL12-T3</b>	SMA	7500/Tape & Reel
SL13-T1	SMA	1800/Tape & Reel
<b>SL13-T3</b>	SMA	7500/Tape & Reel
SL14-T1	SMA	1800/Tape & Reel
<b>SL14-T3</b>	SMA	7500/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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