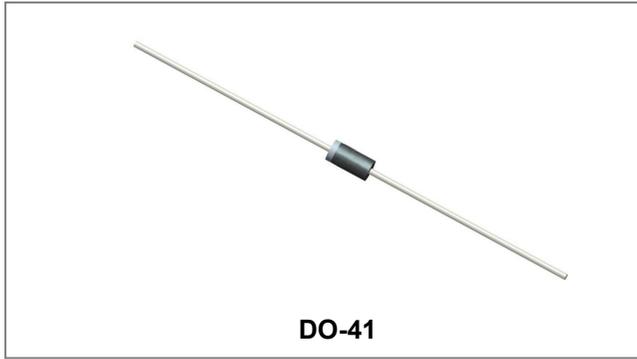


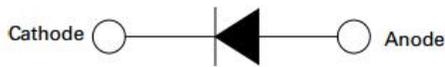
1N5817 THRU 1N5819 SCHOTTKY BARRIER DIODE



Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated leads, Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any

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

Parameter	Symbol	1N5817	1N5818	1N5819	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum DC blocking voltage	V_R				
Maximum RMS voltage	$V_{R(RMS)}$	14	21	28	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25			A
Forward Voltage per element @ $I_F=1\text{A}$, $T_A=25^\circ\text{C}$ @ $I_F=3\text{A}$, $T_A=25^\circ\text{C}$	V_F	0.50 0.75	0.55 0.875	0.60 0.90	V
Maximum DC reverse current $T_A=25^\circ\text{C}$ At rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.1 10.0			mA
Typical junction capacitance (Note 1)	C_J	110			pF
Typical thermal resistance Junction to Ambient	$R_{\theta JA}$	100			$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150			$^\circ\text{C}$

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

Ratings and Characteristics Curves

Fig. 1 Forward Current Derating Curve

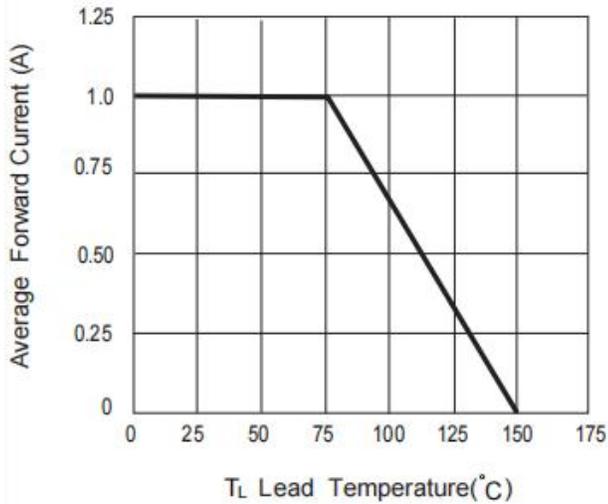
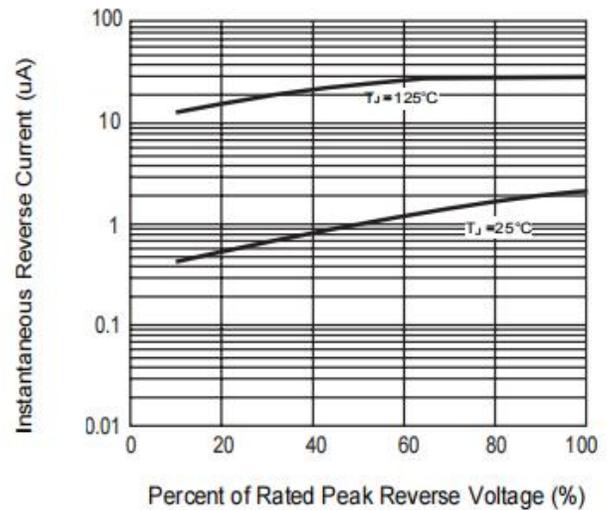
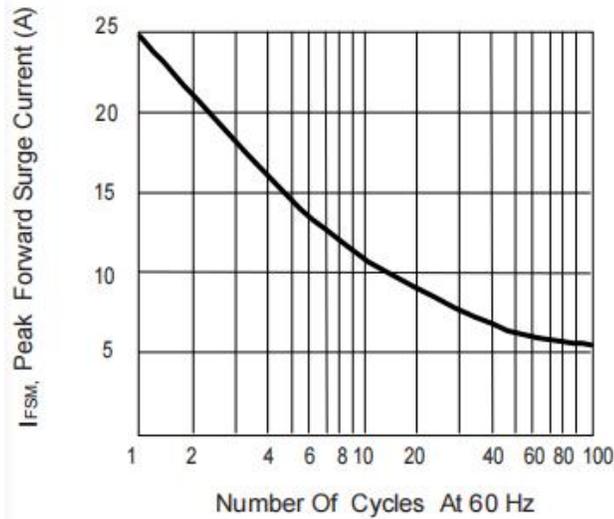
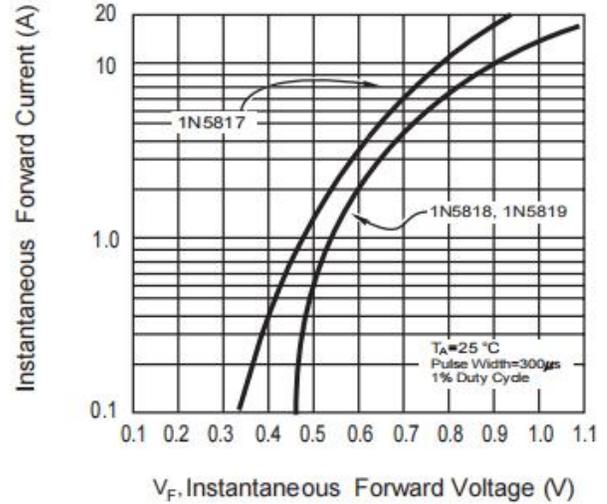
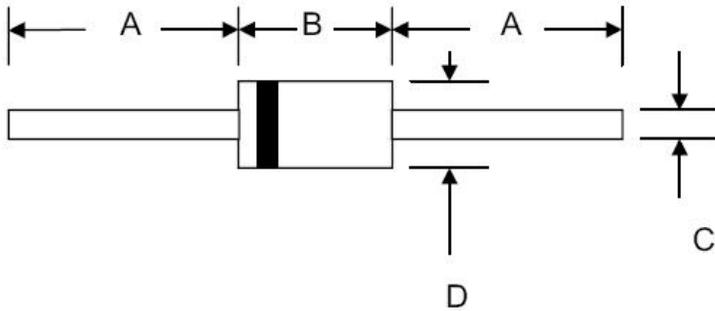


Fig. 2 Typ. Forward Characteristics



Mechanical Dimensions DO-41



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	4.06	5.21	0.160	0.205
C	0.70	0.90	0.028	0.034
D	2.00	2.72	0.079	0.107

Ordering Information

Device	Package	Shipping
1N5817 THRU 1N5819	DO-41 (Pb-Free)	5000pcs /Reel
1N5817TR THRU 1N5819TR	DO-41 (Pb-Free)	5000pcs /Reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

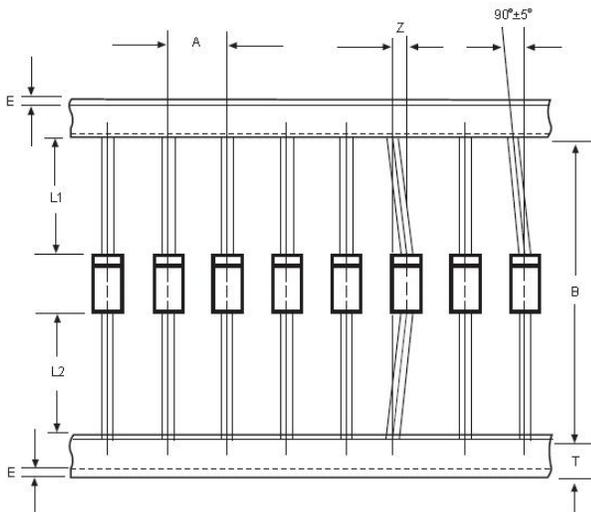


Where XXXXX is YYWWL

1N5817 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Carrier Tape Specification DO-41



SYMBOL	Millimeters	
	Min.	Max.
A	4.50	5.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0



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