

Features

- Ideal for printed circuit board
- Low forward voltage
- Low leakage current
- Ultrafast reverse recovery time
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals



DO-41

Mechanical Data

- **Case:**DO-41
- **Polarity:** Colour band denotes cathode end
- **Mounting position:** Any
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Major Ratings and Characteristics

$I_{F(AV)}$	1.0A
V_{RRM}	20V to 40V
I_{FSM}	25A
V_F	0.45V, 0.55V, 0.60V
$T_j \text{ max.}$	125°C

Maximum Ratings & Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%.

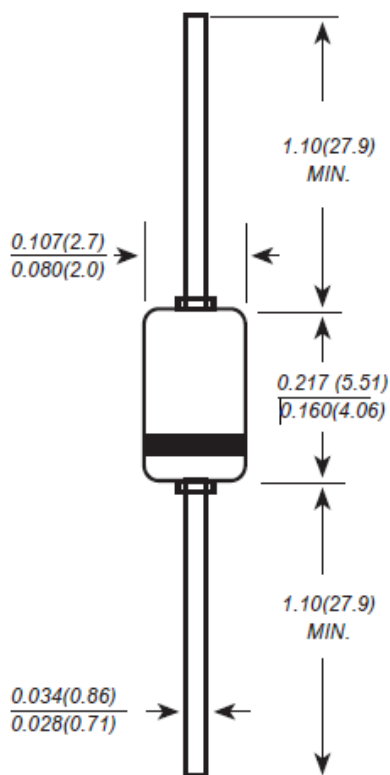
Items	Symbol	1N5817	1N5818	1N5819	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum average forward rectified current at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25			A
Thermal resistance from junction to ambient	$R_{\theta JA}$	50			°C/W
Thermal resistance from junction to lead	$R_{\theta JL}$	20			°C/W
Operating junction temperature range	T_j	-55 to +125			°C
Storage temperature range	T_{STG}	-55 to +125			°C

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Items	Test conditions		Symbol	1N5817	1N5818	1N5819	UNIT
Instantaneous forward	$I_F=1.0\text{ A}$		V_F	0.45	0.55	0.6	V
Reverse current	$V_{RM}=V_{RRM}$	$T_J=25^{\circ}\text{C}$	I_R	0.5			mA
		$T_J=100^{\circ}\text{C}$		10			

Package Outline

DO-41



Dimensions in inches and (millimeters)