

# 1N5817 thru 1N5819

## Schottky Barrier Rectifiers Reverse Voltage 20 to 40V Forward Current 1.0A

### Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low power loss, high efficiency
- \* For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- \* Guarding for over voltage protection
- \* High temperature soldering guaranteed: 260°C/10 seconds at terminals
- \* Green epoxy mold compound

### Mechanical Data

**Case:** JEDEC DO-41, molded plastic over glass body

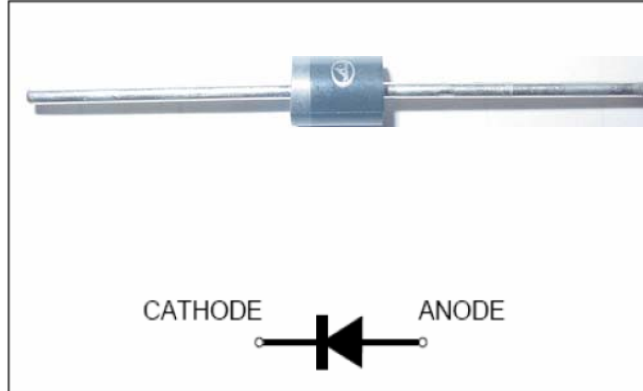
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.011 oz., 0.284 g

**Handling precaution:** None



We declare that the material of product compliance with ROHS requirements

### 1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N5817	1N5818	1N5819	Unit
device marking code		1N5817	1N5818	1N5819	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_{F(AV)}$	1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25			A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50			°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-40 to +150			°C

### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N5817	1N5818	1N5819	Unit
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.45	0.55		V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	1.0 10			mA
Typical junction capacitance at 4.0V, 1MHz	$C_J$	110			PF

#### NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

# 1N5817 thru 1N5819

## 2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

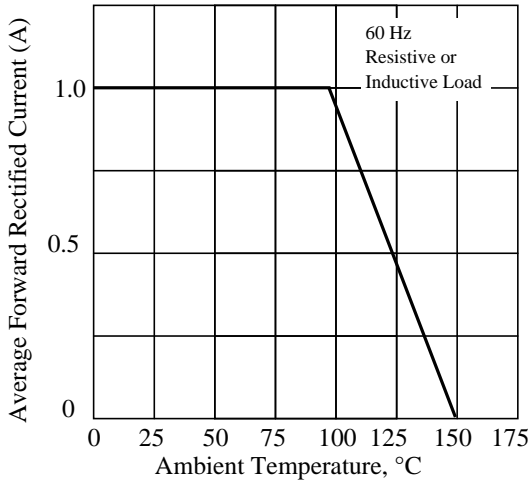


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

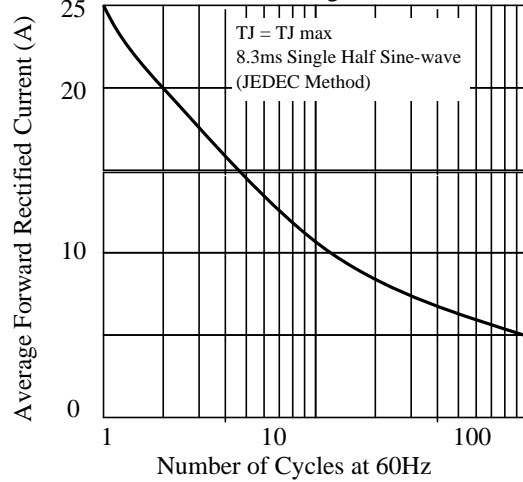


Fig 3 - Typical Instantaneous Forward Characteristics

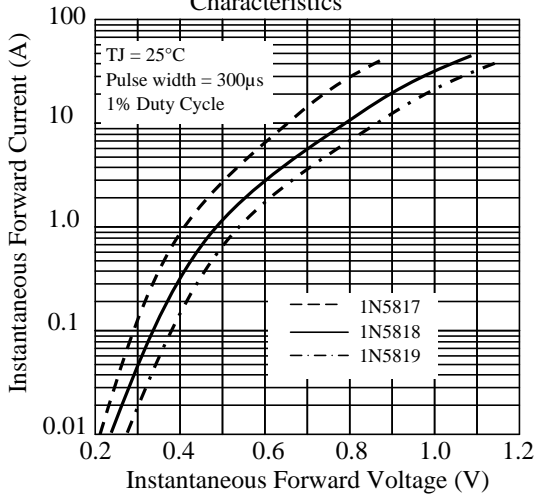


Fig 4 - Typical Reverse Characteristics

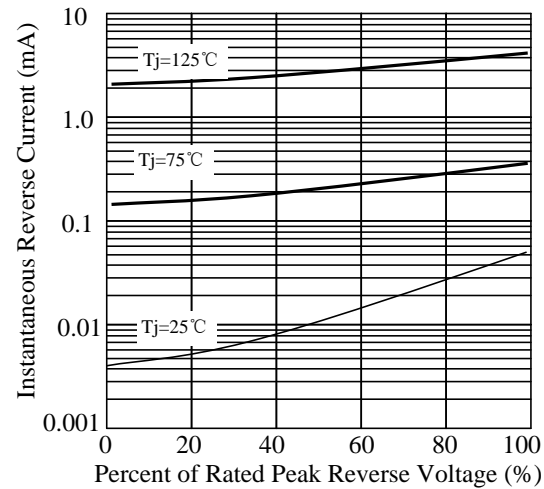


Fig 5 - typical transient thermal impedance

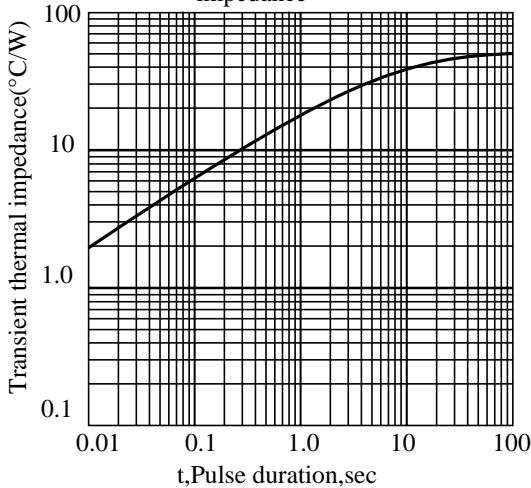
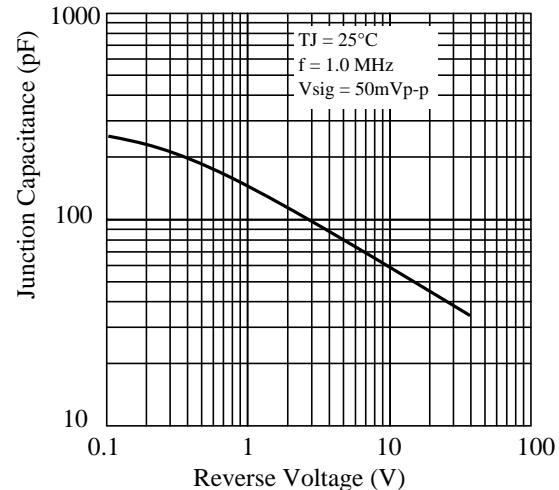
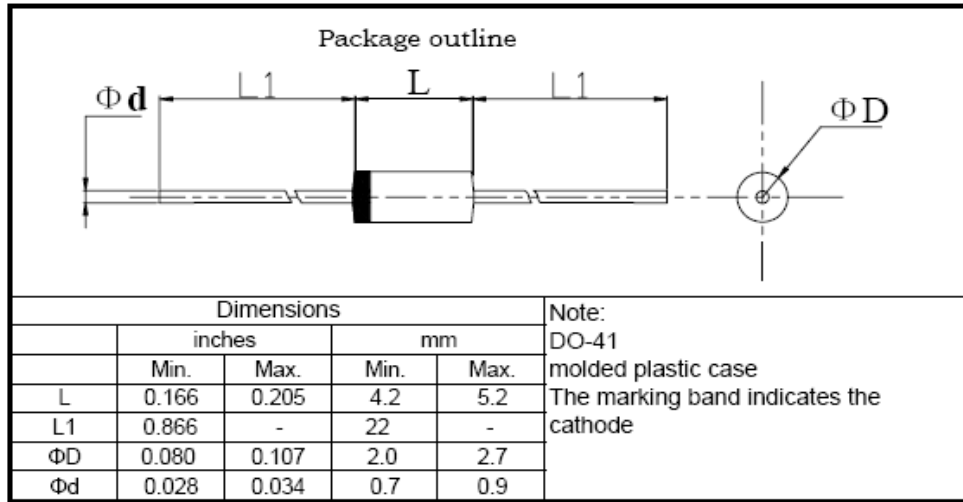


Fig 6 - Typical Junction Capacitance



## 1N5817 thru 1N5819

### 3. dimension:



## 1N5817 thru 1N5819

### 4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	余波	2010.5-26
2	调整结温为150度	周杰	2010.09.24

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)