

# 1N5817-1N5819

## SCHOTTKY RECTIFIERS

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Characteristics	Symbol	Value
Storage temperature range	$T_{STG}$	-55 to + 150°C
Operating junction temperature range	$T_J$	-55 to +150°C
Maximum thermal resistance	$R_{\theta JL}, L = \frac{1}{4}"$	15°C/W Junction to lead
Working peak reverse voltage	$V_{RWM}$	20V
1N5817		30V
1N5818		40V
Repetitive peak reverse voltage	$V_{RRM}$	20V
1N5817		30V
1N5818		40V
Weight		0.011 ounces (0.34 grams) typical

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameters	Symbol	Test Conditions	1N5817	1N5818	1N5819
Average forward current	$I_{F(AV)}$		1A	1A	1A
Ambient temperature	$T_A$	$R_{\theta JL} = 15^\circ\text{C/W}, L = \frac{1}{4}"$	135°C	130°C	130°C
Maximum surge current	$I_{FSM}$	8.3 ms, half sine, $T_J = 150^\circ\text{C}$	50A	50A	50A
Maximum peak forward voltage	$V_{FM}$	$I_{FM} = 0.1\text{A}, T_J = 25^\circ\text{C}^*$	.32V	.37V	.37V
Maximum peak forward voltage	$V_{FM}$	$I_{FM} = 1.0\text{A}, T_J = 25^\circ\text{C}^*$	.45V	.55V	.55V
Maximum peak forward voltage	$V_{FM}$	$I_{FM} = 3.0\text{A}, T_J = 25^\circ\text{C}^*$	.65V	.85V	.85V
Maximum peak reverse current	$I_{RM}$	$V_{RRM}, T_J = 25^\circ\text{C}$	1mA	1mA	1mA
Typical junction capacitance	$C_J$	$V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$	105pF	50pF	50pF

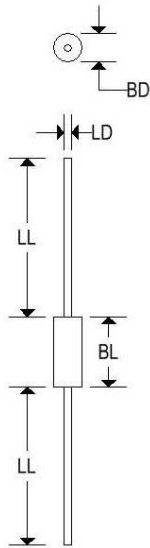
\*Pulse test: Pulse width 300µsec, duty cycle 2%.

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### MECHANICAL CHARACTERISTICS

<b>Case:</b>	DO-41
<b>Marking:</b>	Body painted, alpha-numeric
<b>Polarity:</b>	Cathode band



	DO-41			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.107	-	2.720
BL	-	0.205	-	5.207
LD	0.028	0.034	0.711	0.864
LL	1.000	-	25.400	-

### 1N5817

Figure 1  
Typical Forward Characteristics

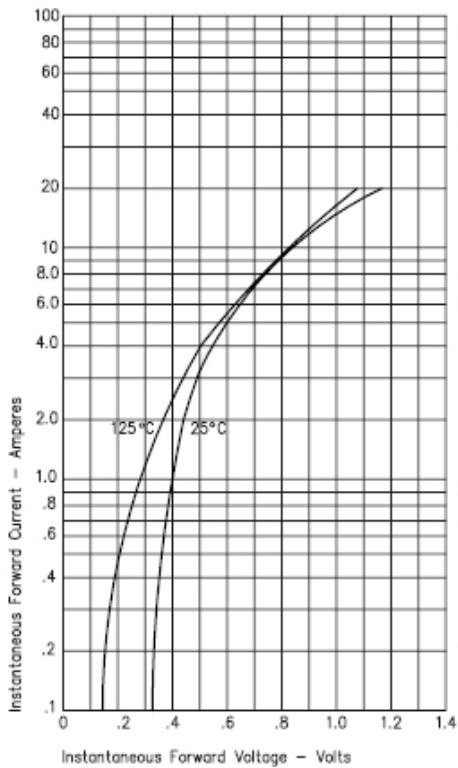


Figure 3  
Typical Junction Capacitance

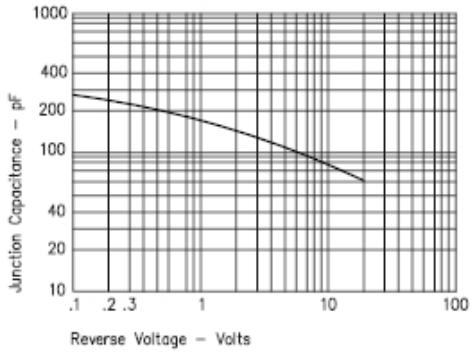
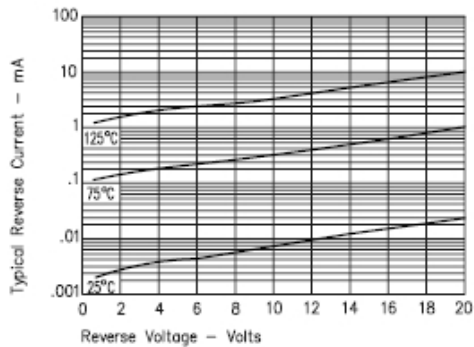


Figure 2  
Typical Reverse Characteristics



# 1N5817-1N5819

## SCHOTTKY RECTIFIERS

# 1N5818 & 1N5819

Figure 1  
Typical Forward Characteristics

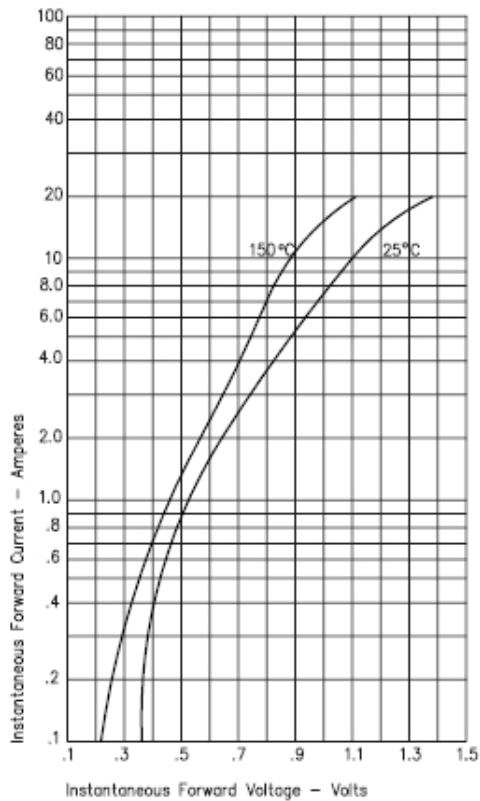


Figure 3  
Typical Junction Capacitance

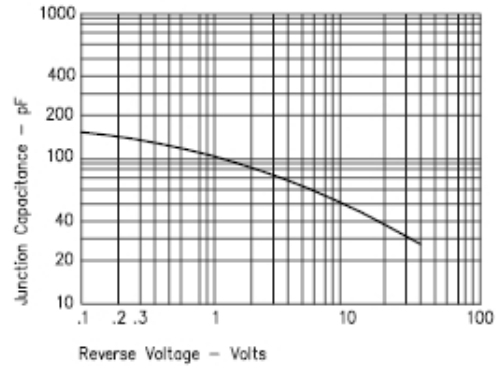


Figure 2  
Typical Reverse Characteristics

