

Schottky Barrier Rectifiers

Reverse Voltage - 20 to 40 V

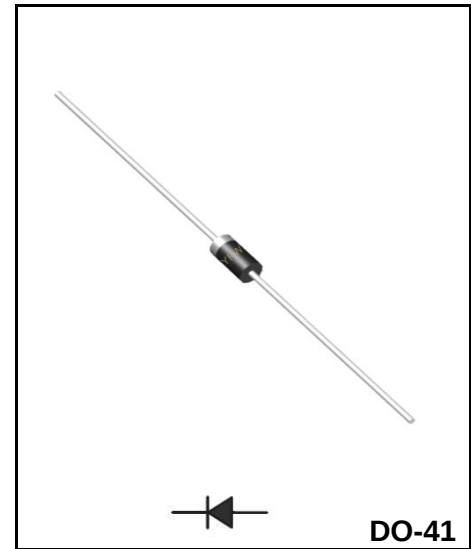
Forward Current - 1 A

FEATURES

- ◆ Guardring for overvoltage protection
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C /10 seconds at terminals
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: DO-41
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.25g /0.0088oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	1N5817	1N5818	1N5819	Units
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 at $T_c = 100\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	25.0			A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	0.45	0.55	0.60	V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^{\circ}\text{C}$	I_R	0.5 50			mA
Typical Thermal Resistance	$R_{\theta JA}$	65			$^{\circ}\text{C/W}$
Operating junction temperature range	T_j	-55 ~ +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150			$^{\circ}\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

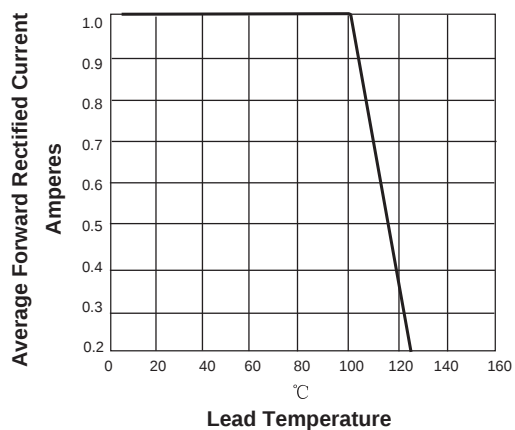


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

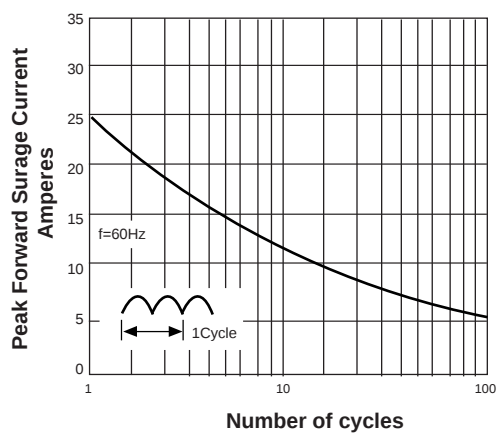


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

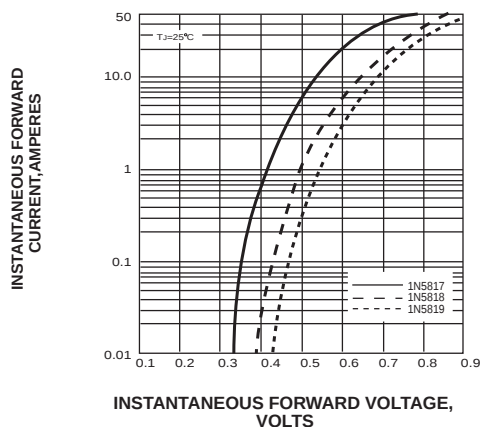
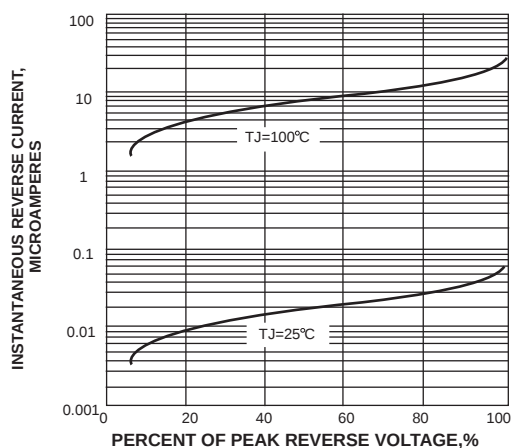


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



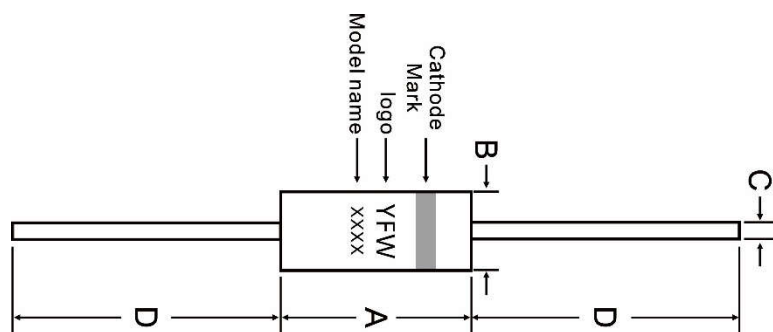
Ordering information

Package	Packing Description	Packing Quantity
DO-41	bulk	1000PCS/Inner Box 25000PCS/Carton
	ammo pack	5000PCS/Inner Box 50000PCS/Carton

Package Dimensions

DO-41

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	4.10	5.20	0.166	0.205
B	2.00	2.70	0.080	0.107
C	0.60	0.70	0.024	0.028
D	25.4	-	1.00	-



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