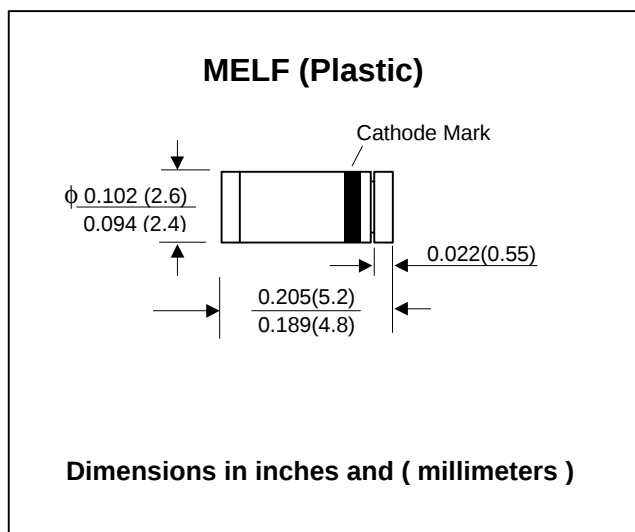


FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop

MECHANICAL DATA :

- * Case : Molded plastic
- * Terminals : Plated Terminals, solderable per MIL-STD-750 Method 2026
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.116 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	1N5817	1N5818	1N5819	UNIT
Maximum Recurrent 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 Current at $T_L = 90\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0			A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at $I_F = 1.0\text{ A}$	V_F	0.45	0.55	0.6	V
Maximum Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^{\circ}\text{C}$	I_R	1.0			mA
	$I_{R(H)}$	10			mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	80			$^{\circ}\text{C/W}$
Typical Junction Capacitance (Note 2)	C_J	110			pF
Junction Temperature Range	T_J	- 55 to + 150			$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150			$^{\circ}\text{C}$

Notes :

- (1) Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

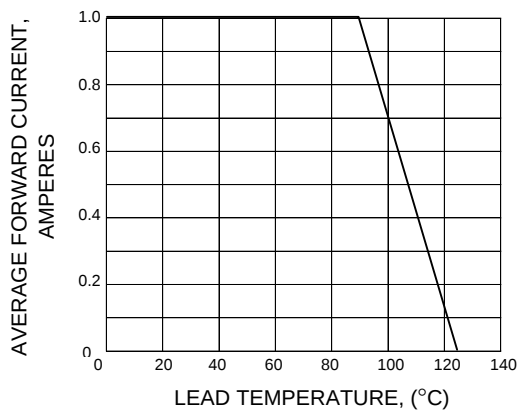


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

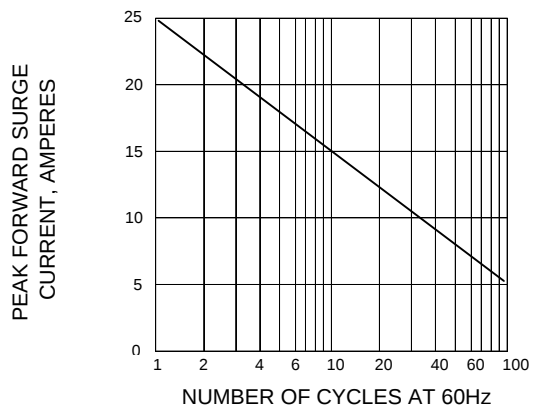


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

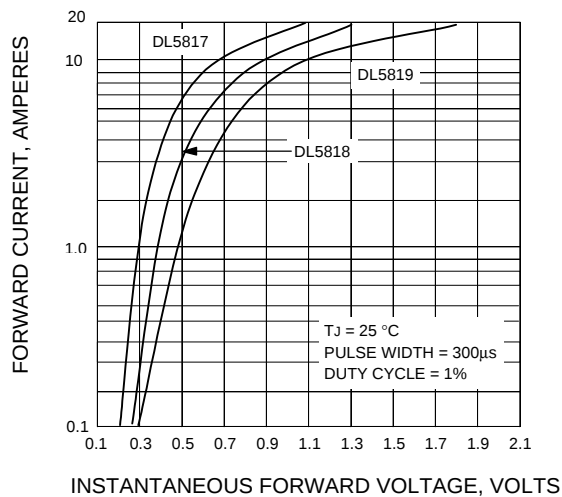


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

