



SCHOTTKY BARRIER RECTIFIER

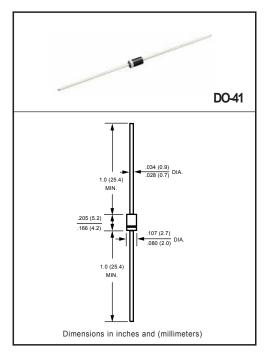
VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage
- * High current capability
- * High speed switching
- * High surge capabitity
- * High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.33 gram



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, derate current by 20%.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted) SYMBOL 1N5817 1N5818 UNITS RATINGS 1N5819 Maximum Recurrent Peak Reverse Voltage Volts V_{RRM} 20 30 40 14 28 Volts Maximum RMS Voltage V_{RMS} 21 Maximum DC Blocking Voltage 20 40 Volts V_{DC} 30 Maximum Average Forward Rectified Current 1.0 Amps 10 .375" (9.5mm) lead length at T_L =90°C Peak Forward Surge Current 8.3 ms single half sine-wave I_{FSM} 25 Amps superimposed on rated load (JEDEC method) R_{0JA} 50 Typical Thermal Resistance (Note 3) ° C/W $R_{\theta JL}$ 15 Typical Junction Capacitance (Note 1) $C_{\rm J}$ 110 pF Operating Temperature Range $T_{\rm J}$ 150 ° C Storage Temperature Range TSTG -55 to + 150 ° C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

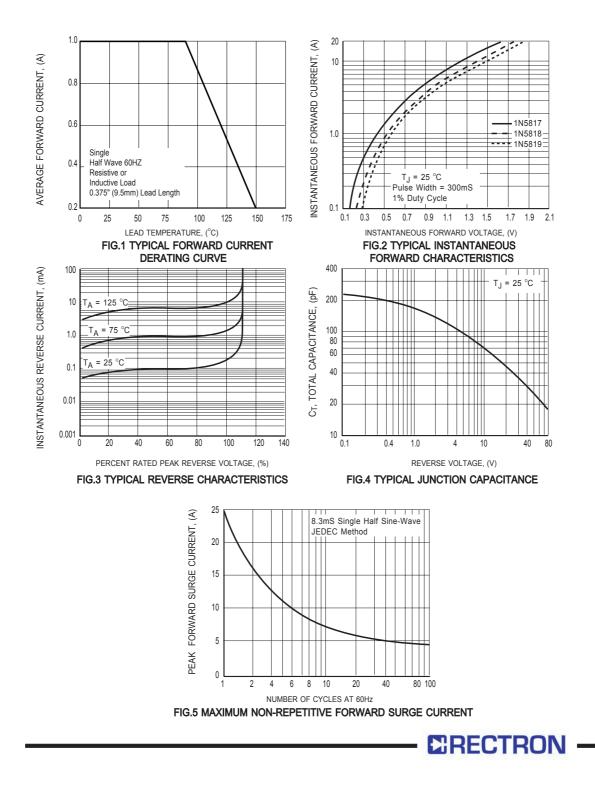
CHARACTERISTICS		SYMBOL	1N5817	1N5818	1N5819	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	.45	.55	.60	Volts
Maximum Instantaneous Forward Voltage at 3.1A DC		VF	.75	0.875	0.90	Volts
Maximum Average Reverse Current	@T _A = 25°C	la la	0.2			mAmps
at Rated DC Blocking Voltage	@T _A = 100°C	IR IR	10			mAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

3. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.

2006-12



DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

