

### SCHOTTKY BARRIER RECTIFIER

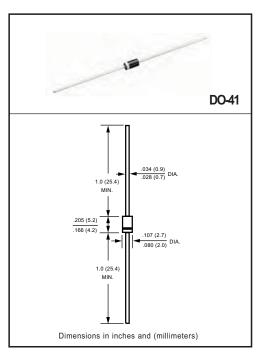
VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere

#### **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.

resistive or inductive load.

## MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

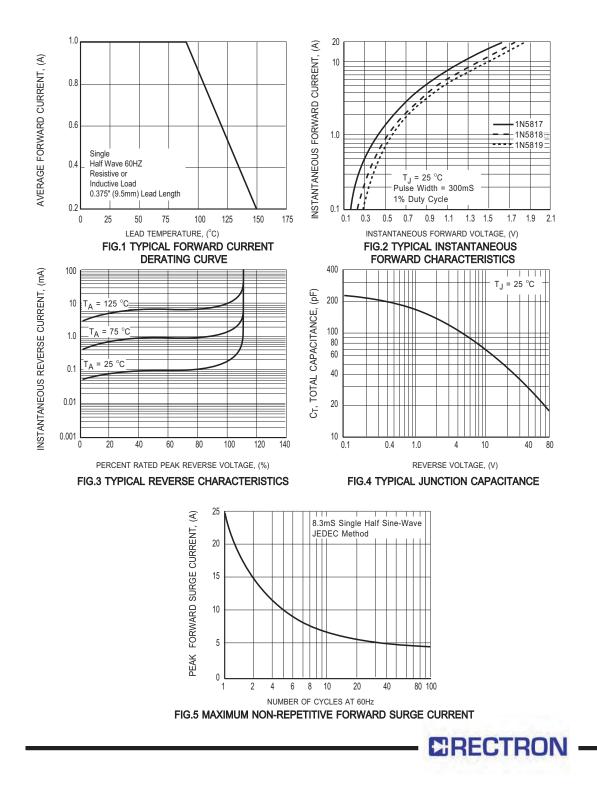
RATINGS	SYMBOL	1N5817	1N5818	1N5819	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at T <sub>L</sub> =90°C	Io	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	25			Amps
Typical Current Squared Time	I <sup>2</sup> T	2.5			A <sup>2</sup> S
Turinel Thomas Desistance (Note 2)	R <sub>0JA</sub>	50			- °C/W
Typical Thermal Resistance (Note 3)	R <sub>0JL</sub>				
Typical Junction Capacitance (Note 1)	CJ	110			pF
Operating Temperature Range	TJ	150			۰C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150			° C

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

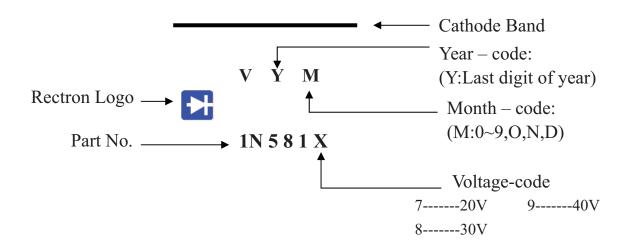
CHARACTERISTICS	SYMBOL	1N5817	1N5818	1N5819	UNITS
Maximum Instantaneous Forward Voltage at 1.0/	VF	.45	.55	.60	Volts
Maximum Instantaneous Forward Voltage at 3.1/	VF	.75	0.875	0.90	Volts
Maximum Average Reverse Current @T <sub>A</sub> = 25°C				mAmps	
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C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

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts. 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)". 2009-10 REV:A

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



## **Marking Description**



# **C**RECTRON

# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-41	-В	1,000	194*75*21	415*220*255	50,000	16.2

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-41	-T	5,000	5,000	5.0	52	330	355*350*335	20,000	10.49

### AMMO PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-41	-F	3,000	5.0	52	255*73*100	400*268*225	30,000	13.0
DO-41	-E	3,000	5.0	26	256*48*94	365*270*217	42,000	12.41



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