

1N5817 THRU 1N5819

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere

FEATURES

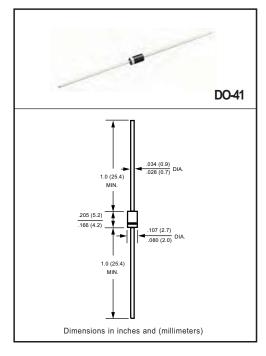
- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage
- * High current capability
- * High speed switching
- * High surge capabitity
- * High reliability

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



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 _{RRM}	20	30	40	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V _{DC}	20 30		40	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at T _L =90°C	Io	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25			Amps
Typical Current Squared Time	I ² T	2.5			A ² S
Tunical Thomas Desistance (Note 2)	R ₀ JA	50			0.004
Typical Thermal Resistance (Note 3)	R ₀ JL		- °c/w		
Typical Junction Capacitance (Note 1)	CJ	110			pF
Operating Temperature Range	TJ	150			۰C
Storage Temperature Range	T _{STG}	-55 to + 150			°C

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

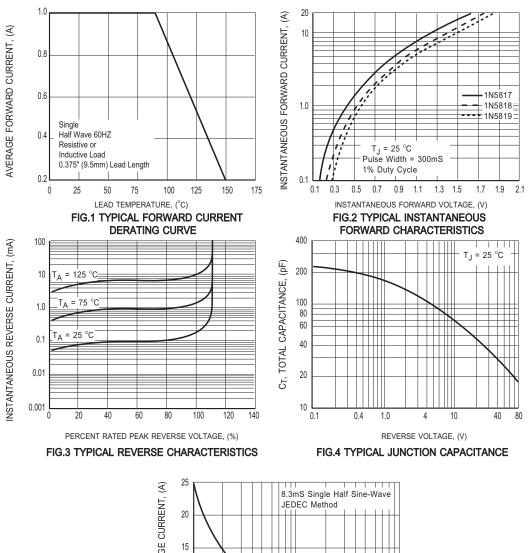
CHARACTERISTICS	SYMBOL	1N5817	1N5818	1N5819	UNITS	
Maximum Instantaneous Forward Voltage at 1.0A	VF	.45	.55	.60	Volts	
Maximum Instantaneous Forward Voltage at 3.1A	VF	.75	0.875	0.90	Volts	
Maximum Average Reverse Current @T _A = 25°C		le le	0.2			mAmps
at Rated DC Blocking Voltage	@T _A = 100°C	IR IR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

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

- 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
- 3. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.

2009-10 REV:A

RATING AND CHARACTERISTICS CURVES (1N5817 THRU 1N5819)



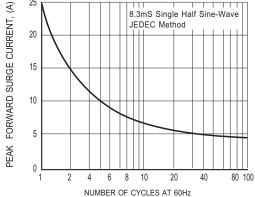
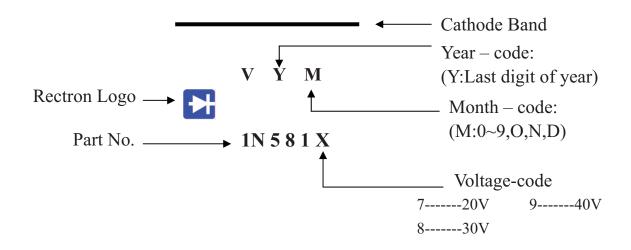


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



Marking Description





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	-B	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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