



#### **SCHOTTKY BARRIER RECTIFIERS**

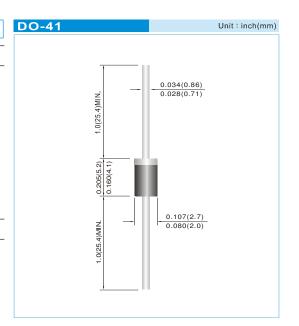
VOLTAGE 20 to 40 Volts CURRENT

### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters , free wheeling , and polarity protection applications .
- · Lead free in comply with EU RoHS 2002/95/EC directives



- Case: DO-41 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750,Method 2026
- · Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.0118 ounces, 0.336 grams



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	1N5817	1N5818	1N5819	UNITS
Maximum Recurrent Peak Reverse Voltage		20 30		40	V
Maximum RMS Voltage		14 21		28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Current .375"(9.5mm) lead length (See Figure1)	I <sub>F(AV)</sub>		А		
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>		А		
Maximum Forward Voltage at 1.0A DC Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	0.47 0.75	0.55 0.875	0.60 0.90	V
Maximum DC Reverse Current T <sub>J</sub> =25°C at Rated DC Blocking Voltage T <sub>J</sub> =100°C	I <sub>R</sub>	0.2 10			mA
Typical Thermal Resistance	R <sub>eJA</sub>	80			°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125 -55 to +1		-55 to +150	°C

1 Ampere





#### **RATING AND CHARACTERISTIC CURVES**

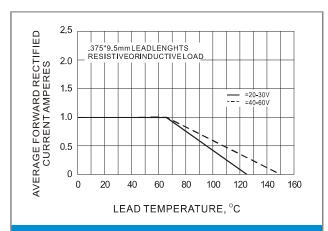
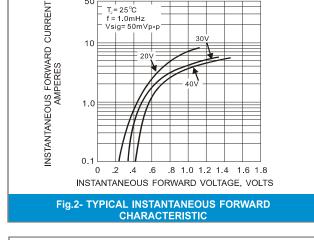


Fig.1- FORWARD CURRENT DERATING CURVE



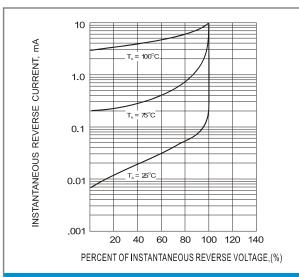


Fig.3- TYPICAL REVERSE CHARACTERISTIC

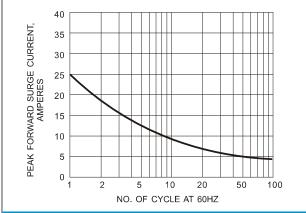


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT

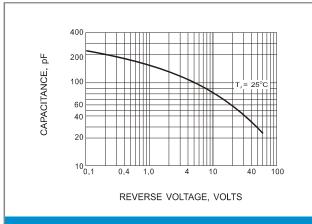


Fig.5- TYPICAL JUNCTION CAPACITANCE





### Part No\_packing code\_Version

1N5817\_AY\_00001

1N5817\_AY\_10001

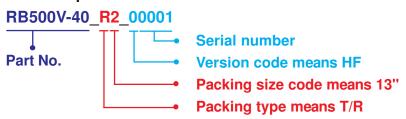
1N5817\_B0\_00001

1N5817\_B0\_10001

1N5817\_R2\_00001

1N5817\_R2\_10001

## For example:



Packing Code XX				Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	X				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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