DO-41 PLASTIC SILICON RECTIFIERS

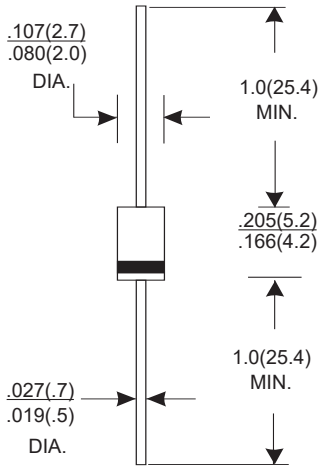
FEATURES

- Plastic package has Underwriters Laboratory flammability Classification 94V-0
- Metal silicon junction,majority carrier conduction
- Guardring for overvoltage protection
- Low power loss,high efficiency
- High current capability,Low forward voltage drop
- High surge capability
- For use in low voltage,high frequency inverters, free wheeling,and polarity protection applicatinos
- High temperature soldering guaranteed:260 ℃/10 seconds at terminals

Component in accordance tu RoHS 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case:DO-41 molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

TYPE NUMBER	SYMBOL	1N5817	1N5818	1N5819	UNITS
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 Rectified Current .375"(9.5mm) Lead Length at Ta=90 C °	$I_{(AV)}$	1.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	0.45	0.55	0.60	V
Maximum DC Reverse Current Ta=25°C at Rated DC Blocking Voltage Ta=100°C	I_R	0.5 10			mA
Typical Junction Capacitance (Note1)	C_J	110			pF
Typical Thermal Resistance RθJA (Note 2)	$R_{\theta JC}$	80			℃/W
Operating Temperature Range	T_J	-55__+125			℃
Storage Temperature Range	T_S	-55__+150			℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

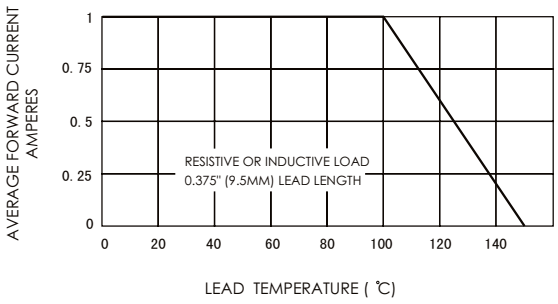


FIG.2-MAXIMUM NON-REPETITVE SURGE

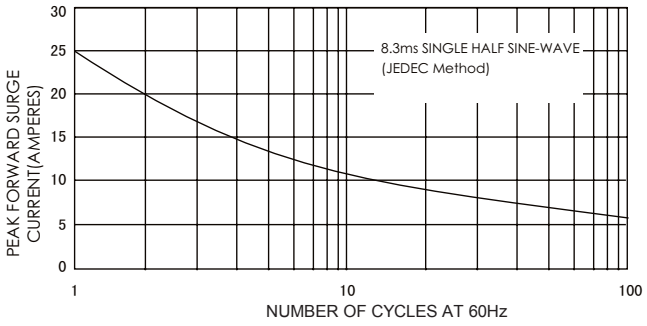


FIG.3-TYPICAL REVERSE CHARACTERISTICS

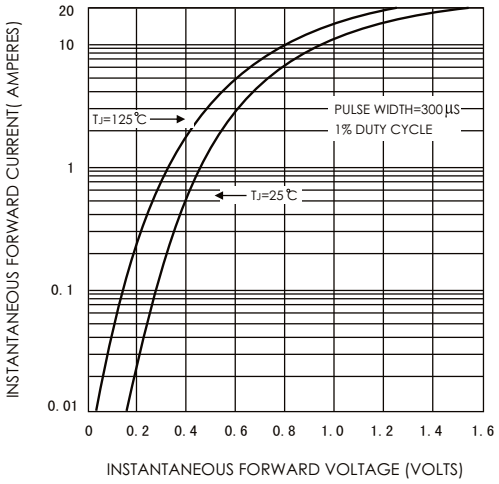


FIG.4-TYPICAL FORWARD CHAR ACTERISTICS

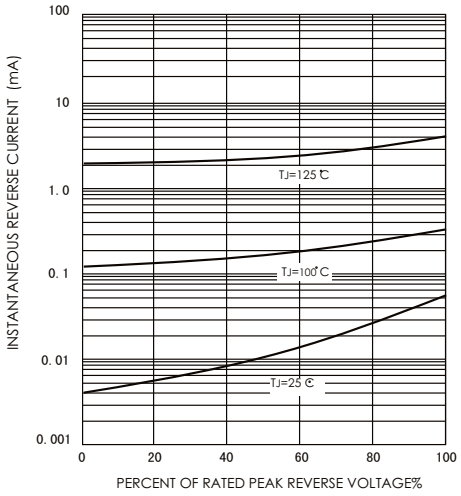


FIG.5-TYPICAL JUNCTION CAPACITANCEINSTANTANEOUS

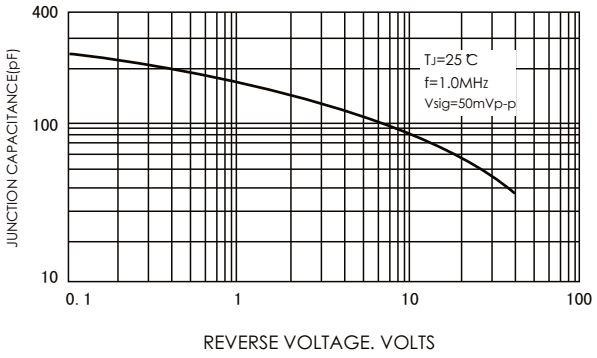


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE