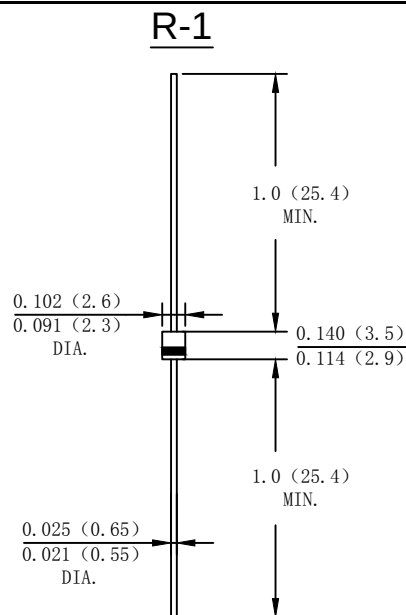


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- For use in low voltage,high frequency inverters ,free wheeling , and polarity protection applications .
- Exceeds environmental standards of MIL-S-19500/228

Mechanical Data

- Case: Moeded plastic R-1
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For Rohs/Lead Free Version



Dimensions in inches and(millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	1S2	1S3	1S4	1S5	1S6	1S8	1S10	1S15	1S20	1S25	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @T _A =75 °C	I _o	1.0										A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30										A
Forward Voltage @IF=1.0A	V _{FM}	0.55			0.7		0.85		0.92		0.95	V
Peak Reverse Current @T _A =25 °C	I _R	0.1					0.05					mA
At Rated DC Blocking Voltage @T _A =100 °C		10.0					5.0					
Typical Junction Capacitance (Note 2)	C _J	110										pF
Typical Thermal Resistance Junction to Ambient(Note 1)	R _{θJA}	80										°C/W
Operating Temperature Range	T _J	-55 to+150										°C
Storage Temperature Range	T _{STG}	-55 to+150										°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

Fig.1-FORWARD CURRENT DERATING CURVE

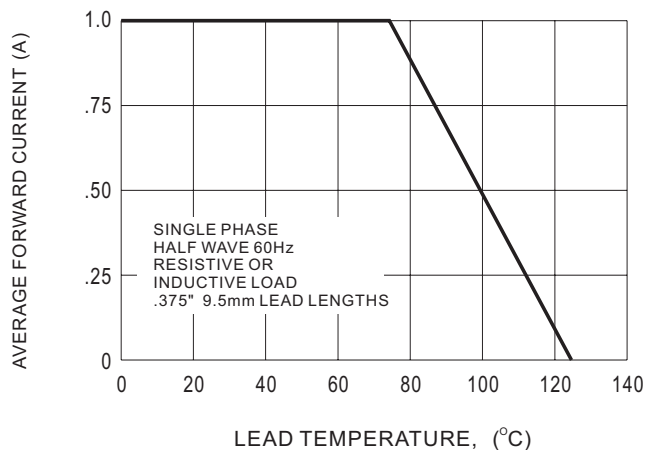


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

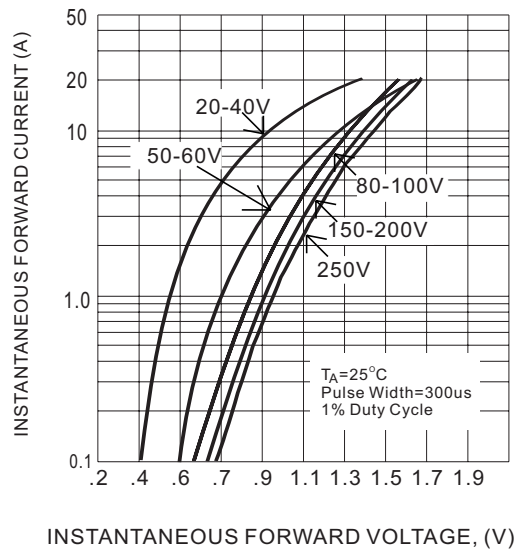


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

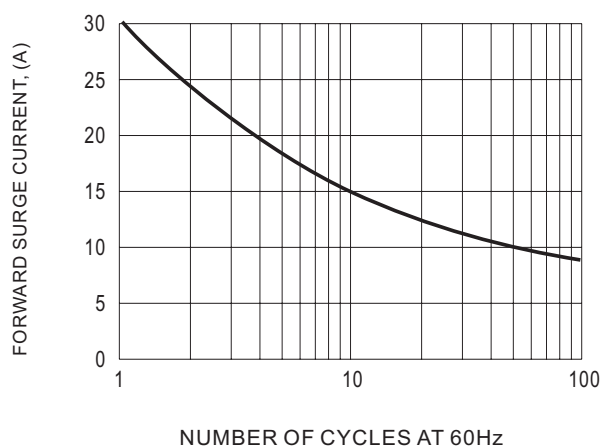


Fig.4-TYPICAL JUNCTION CAPACITANCE

