



1S2 THRU 1S25

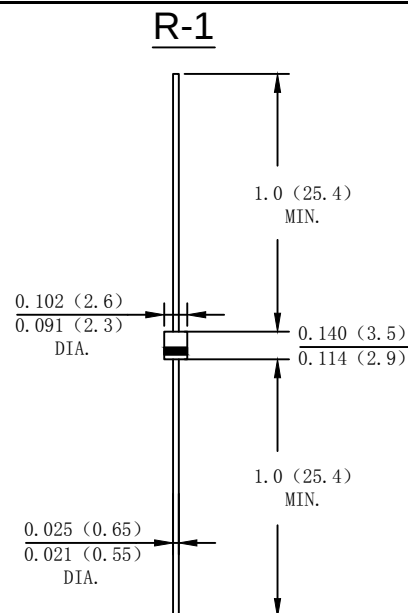
1.0 AMP. Schottky Barrier Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic R-1
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes 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	1S45	1S5	1S6	1S8	1S10	1S15	1S20	1S25	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	45	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V _{RMS}	14	21	28	31.5	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	45	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

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Fig.1-FORWARD CURRENT DERATING CURVE

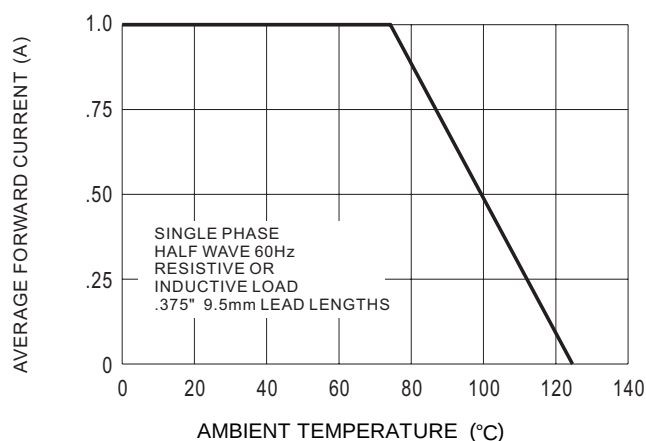
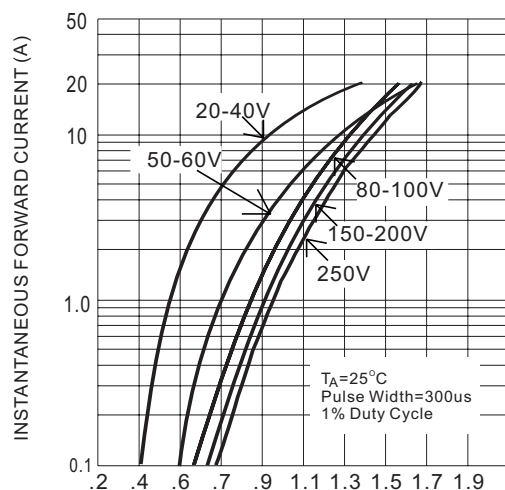


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, (V)

Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

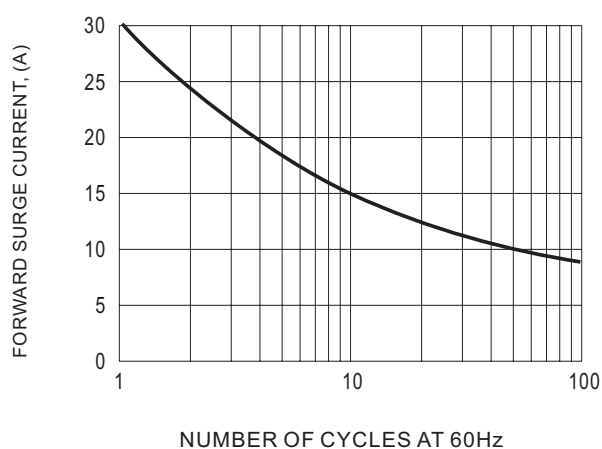


Fig.4-TYPICAL JUNCTION CAPACITANCE

