



1E1G THRU 1E8G

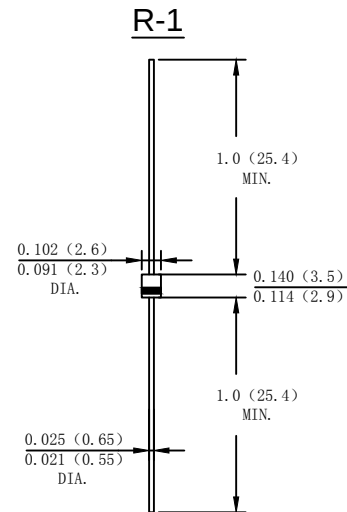
1.0 AMP. Glass Super Fast Rectifiers

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 dented cathode end
- Mounting Position: Any
- Marking: 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	1E1G	1E2G	1E3G	1E4G	1E5G	1E6G	1E8G	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V
Average Rectified Output Current (Note 1) @T _A =55℃	I _O	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25							A
Forward Voltage @IF=1.0A	V _{FM}	0.95				1.25		1.7	V
Peak Reverse Current @T _A =25℃	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125℃		100							
Maximum Reverse Recovery Time (Note2)	T _{RR}	35							nS
Typical Junction Capacitance (Note 3)	C _J	30				25			pF
Typical Thermal Resistance Junction to Ambient(Note 1)	R _{θJA}	40							℃/W
Operating Temperature Range	T _J	-55 to + 150							℃
Storage Temperature Range	T _{STG}	-55 to + 150							℃

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

2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.

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

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FIG. 1 – FORWARD CURRENT DERATING CURVE

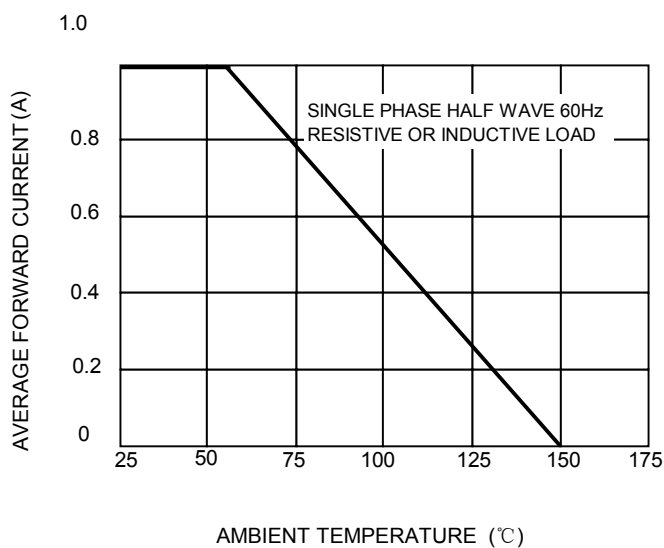


FIG.2-TYPICAL FORWARD CHARACTERISTICS

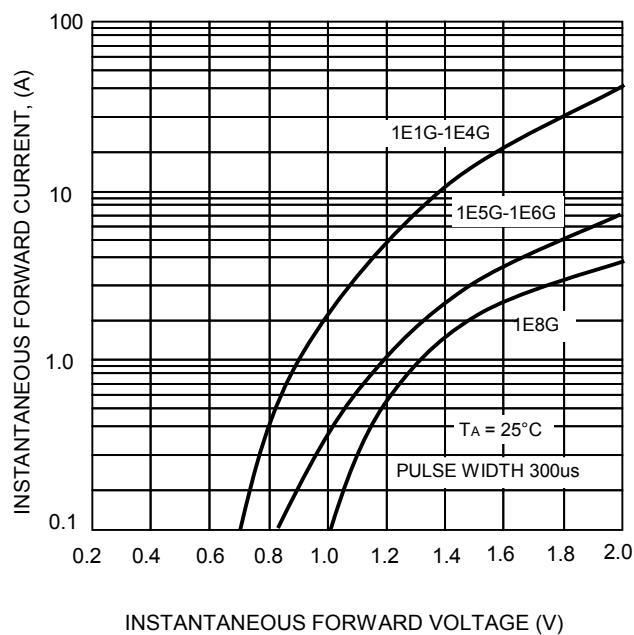


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

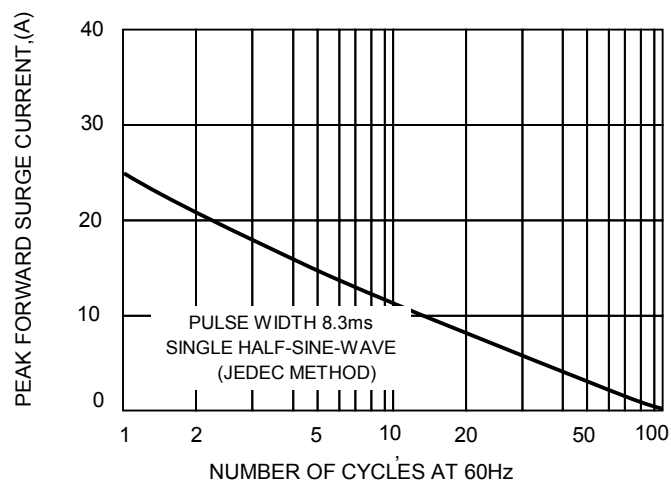


FIG.4 – TYPICAL JUNCTION CAPACITANCE

