FR101G(H) THRU FR107G(H)

1.0 AMP Glass Fast Recovery Rectifiers

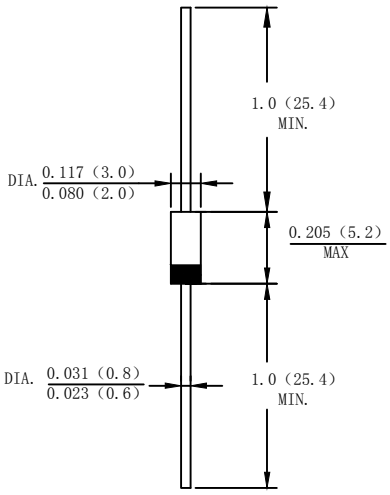
Features

- Low power loss.
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-41
- 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

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	FR101G(H)	FR102G(H)	FR103G(H)	FR104G(H)	FR105G(H)	FR106G(H)	FR107G(H)	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current (Note 1) @T_L =90℃	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	5.084							A^2s
Forward Voltage @IF=1.0A	V_{FM}	1.3							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 (Note 2)	T_{RR}	150				250	500		nS
Typical Junction Capacitance (Note 3)	C_J	7							pF
Typical Thermal Resistance Junction to Ambient(Note 4)	$R_{\theta JA}$	65							℃/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: IF=0.5A, IR=1A, Irr=0.25A.

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

4.Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

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FIG. 1 – FORWARD CURRENT DERATING CURVE

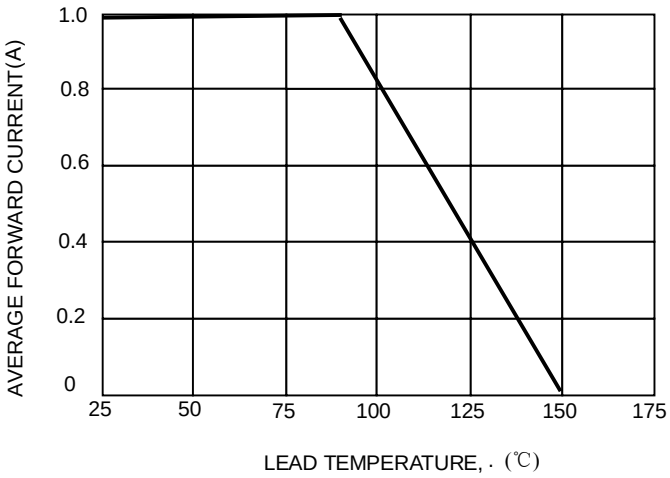


FIG.2-TYPICAL FORWARD CHARACTERISTICS

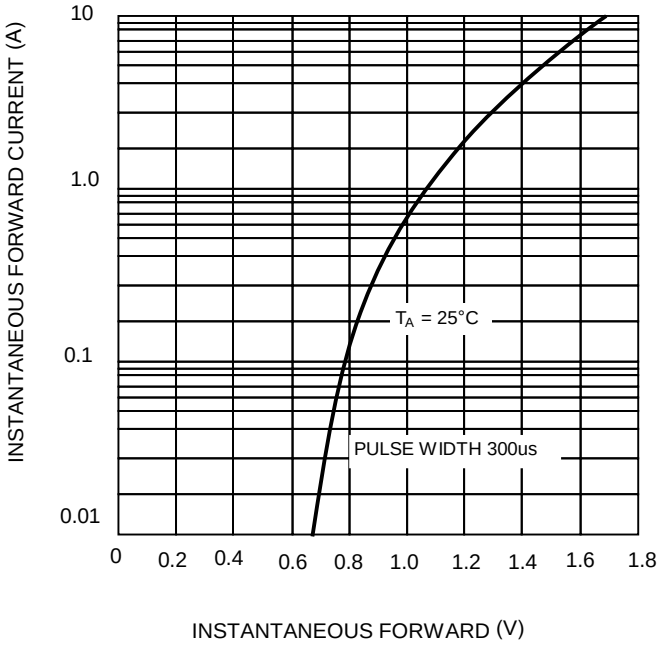


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

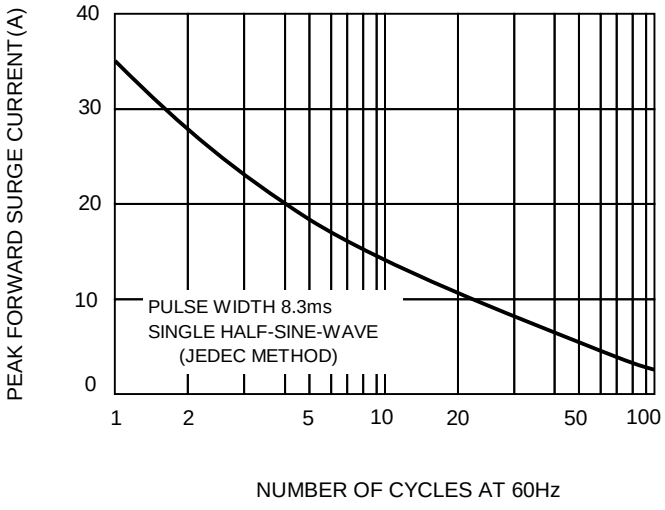
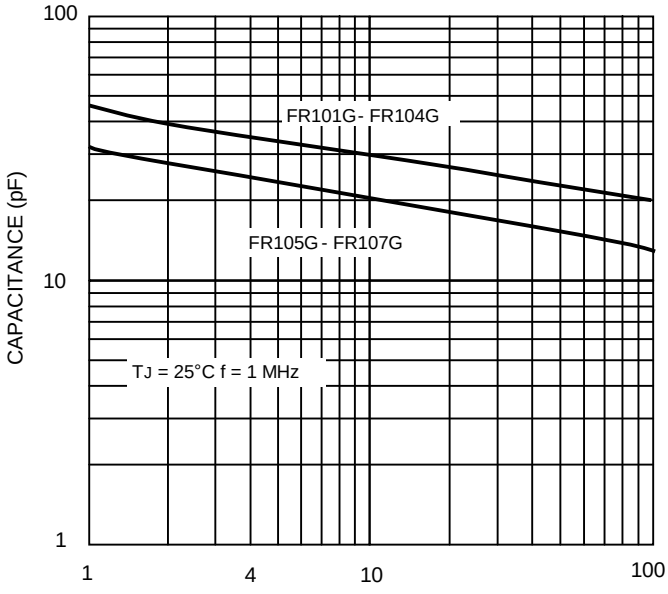


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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