

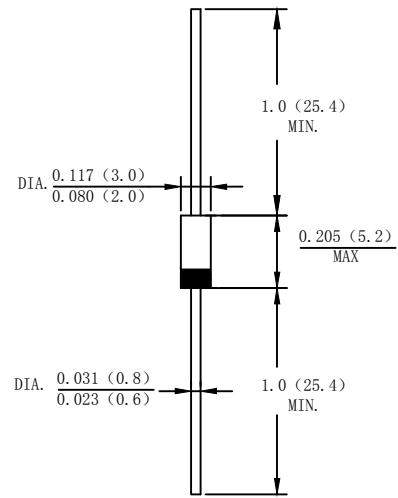
### Features

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

### Mechanical Data

- Case: Moeded 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°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	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G	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) @ $T_A = 55^\circ C$	$I_o$	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	35							A
Forward Voltage @ $I_F = 1.0A$	$V_{FM}$	1.3							V
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		100							
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	150				250	500		nS
Typical Junction Capacitance (Note 3)	$C_J$	25				15			pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	25							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to + 150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to + 150							$^\circ C$

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

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

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

FIG. 1 – FORWARD CURRENT DERATING CURVE

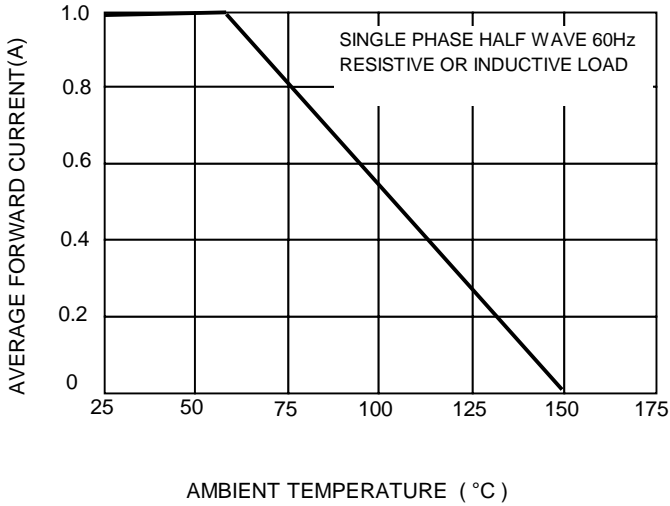


FIG.2-TYPICAL FORWARD CHARACTERISTICS

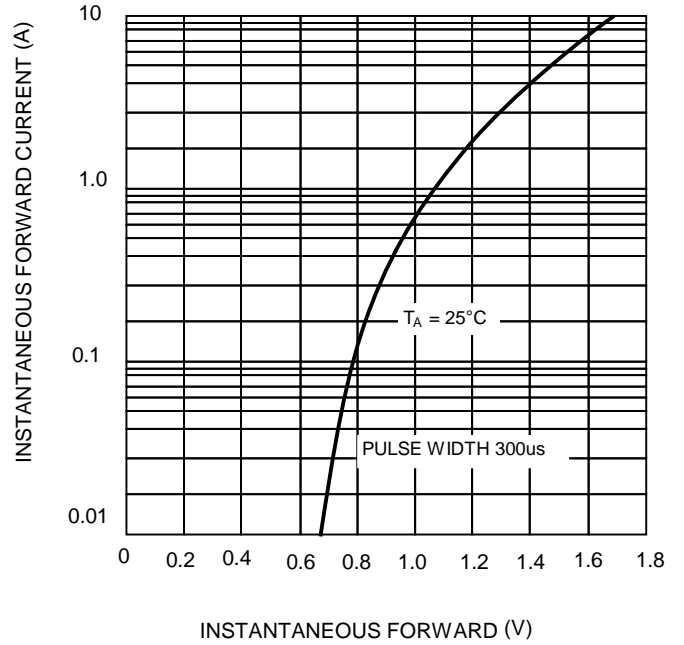


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

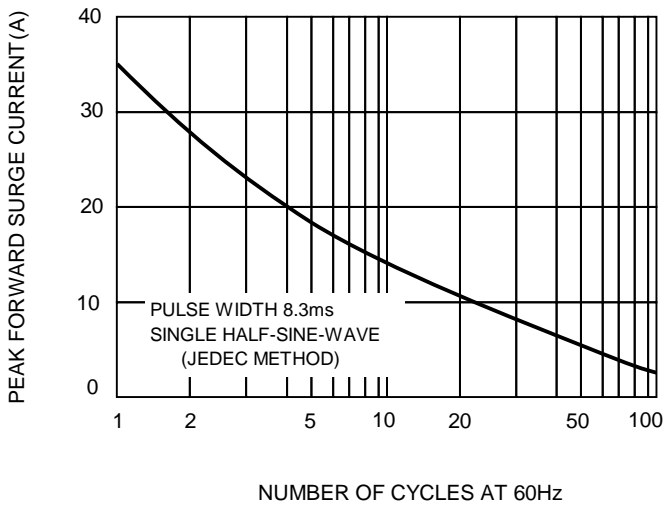


FIG.4 – TYPICAL JUNCTION CAPACITANCE

