

RoHS Compliant Product
 A suffix of "-C" specifies halogen & lead-free

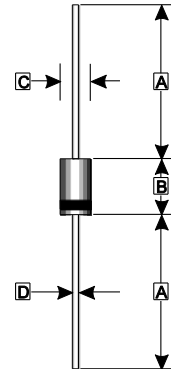
FEATURES

- Low Power Loss
- High Current Capability
- High Reliability
- High Surge Current Capability

MECHANICAL DATA

- Case: DO-41
- Case Material: Molded plastic, UL Flammability classification rating 94V-0
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Cathode band

DO-41



ORDER INFORMATION

Part Number	Type
FR101G ~ FR107G	Lead (Pb)-free
FR101G-C ~ FR107G-C	Lead (Pb)-free and Halogen-free

REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	4.10	5.21
C	2.00	3.00
D	0.60	0.90

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		FR 101G	FR 102G	FR 103G	FR 104G	FR 105G	FR 106G	FR 107G	
Maximum Repetitive 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 Forward Rectified Current ¹ @ $T_L=90^\circ C$	I_F	1							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35							A
Forward Voltage @ $I_F=1A$	V_F	1.3							V
Peak Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	5							μA
	$T_A=125^\circ C$	100							
Maximum Reverse Recovery Time	T_{rr}	150		250		500		nS	
Typical Junction Capacitance ²	C_J	7							pF
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	75							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ C$

Notes:

1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1MHz and Applied reverse Voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

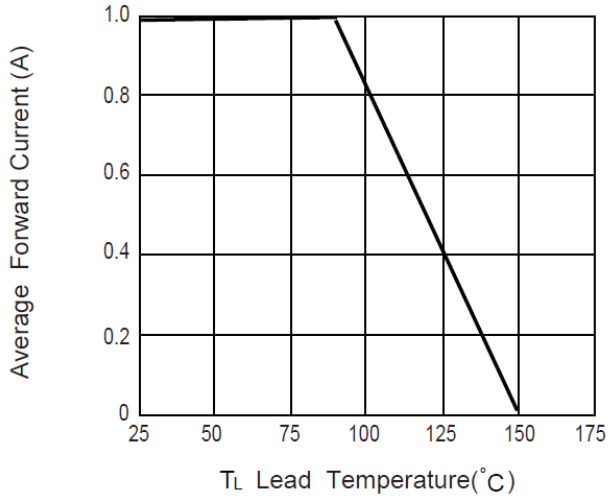


Fig. 2 Typ. Forward Characteristics

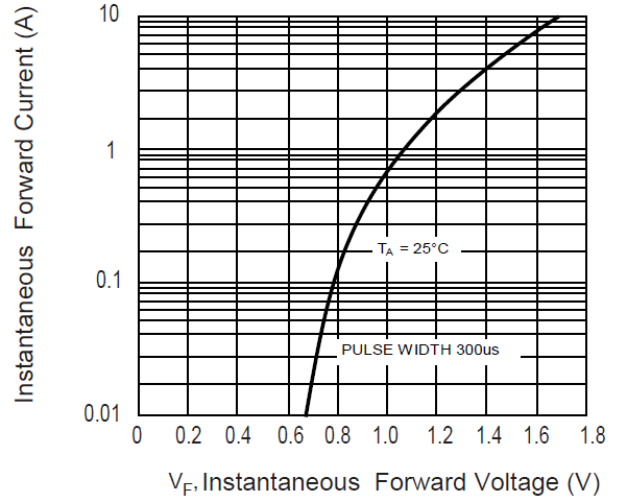


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

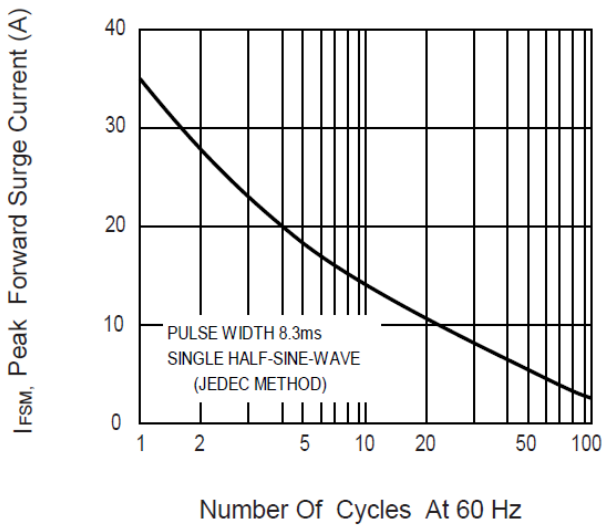


Fig. 4 Typical Reverse Characteristics (per element)

