

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

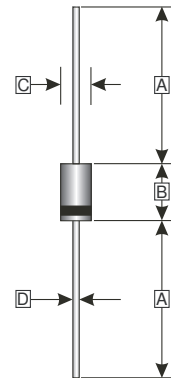
### FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Plastic Material-UL Flammability 94V-0

### MECHANICAL DATA

- Case: Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

**DO-41**



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

### ORDER INFORMATION

Part Number	Type
SF101G~SF105G	Lead (Pb)-free
SF101G-C~SF105G-C	Lead (Pb)-free and Halogen-free

### 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 Numbers					Unit
		SF101G	SF102G	SF103G	SF104G	SF105G	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	
Average Rectified Output Current <sup>1</sup>	$I_F$	1					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 <sup>2</sup> S
Forward Voltage @ $I_F=1A$	$V_F$	0.95		1.3	1.7	V	
Peak Reverse Current @Rated DC Blocking Voltage	$I_R$	5					$\mu A$
		100					
Maximum Reverse Recovery Time <sup>2</sup>	$T_{RR}$	35					nS
Typical Junction Capacitance <sup>3</sup>	$C_J$	10					pF
Thermal Resistance junction-Ambient <sup>4</sup>	$R_{\theta JA}$	75					°C/W
Operating & Storage Temperature Range	$T_J, T_{STG}$	-55~150					°C

Notes:

1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Reverse Recovery Time test condition:  $I_F=0.5A, I_R=1A, I_{RR}=0.25A$ .
3. Measured at 1MHz and applied reverse voltage of 4V D.C.
4. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1 – FORWARD CURRENT DERATING CURVE

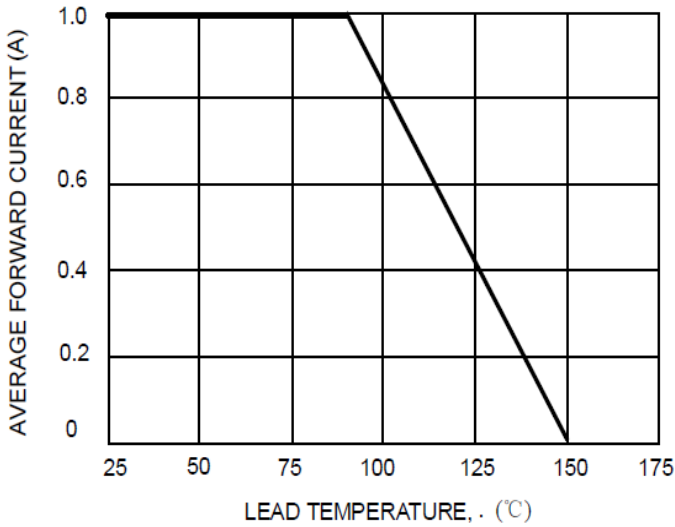


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

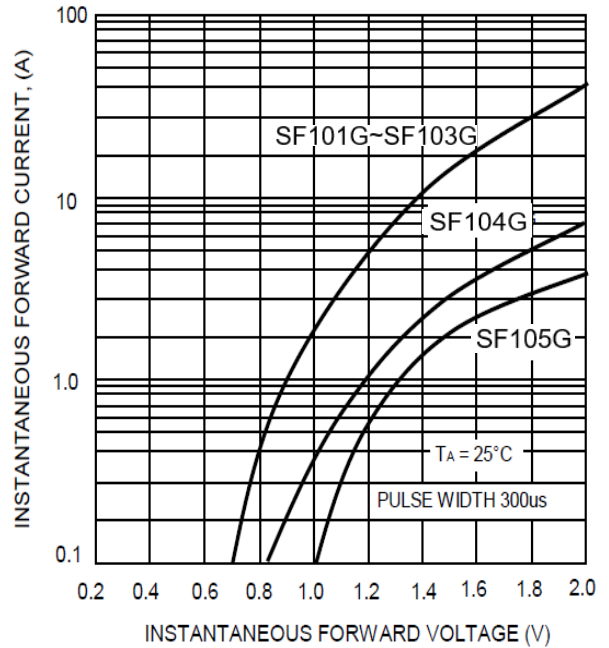


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

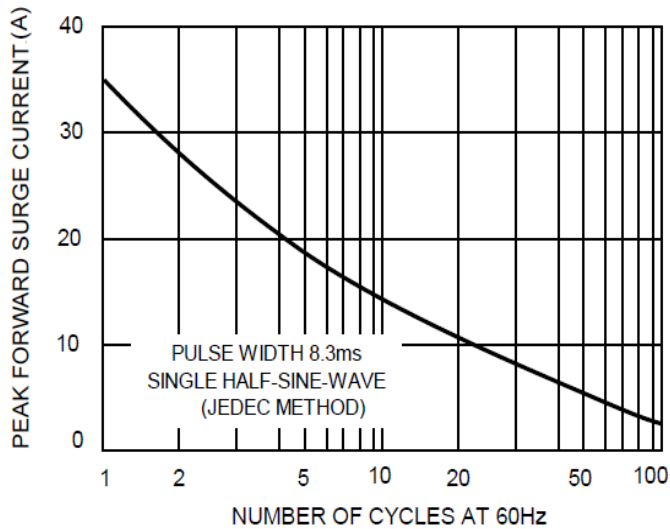


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

