

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

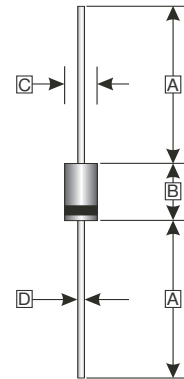
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Good for switching mode application

PACKAGING INFORMATION

- Glass Passivated
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.1050 grams (approximately)

DO-27



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.53
C	4.80	5.60
D	1.20	1.32

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
		SF 31G	SF 32G	SF 33G	SF 34G	SF 35G	
Maximum Recurrent Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Instantaneous Forward Voltage @ $I_F=3A$	V_F	0.95			1.3	1.70	V
Maximum Average Forward Rectified Current @ 0.375" (9.5mm) lead length @ $T_L=55^\circ C$	I_O	3					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125					A
Maximum DC Reverse Current	$T_J=25^\circ C$	5.0					μA
	$T_J=125^\circ C$	250					
Maximum Reverse Recovery Time ¹	T_{RR}	35					nS
Typical Thermal Resistance	$R_{\theta JA}$	50					$^\circ C / W$
Typical Thermal Resistance	$R_{\theta JC}$	15					$^\circ C / W$
Typical Junction Capacitance ²	C_J	60					pF
Junction and Storage Temperature Range	T_J, T_{STG}	150, -55~150					$^\circ C$

Note:

1. $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$
2. $f=1MHz$ and applied 4V DC reverse voltage

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

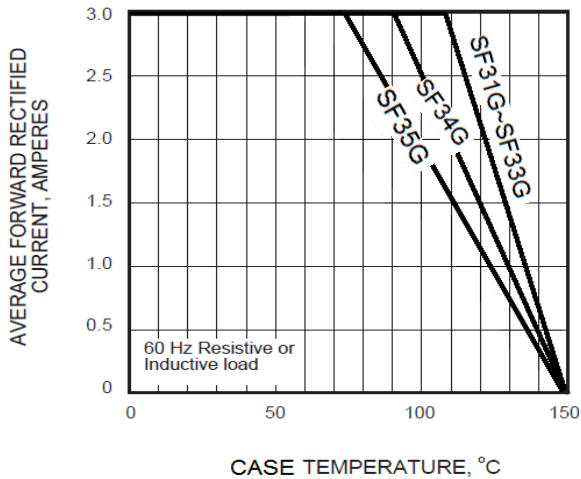


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

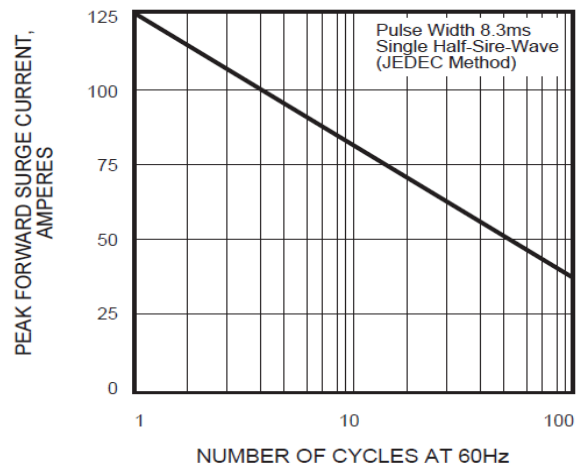


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

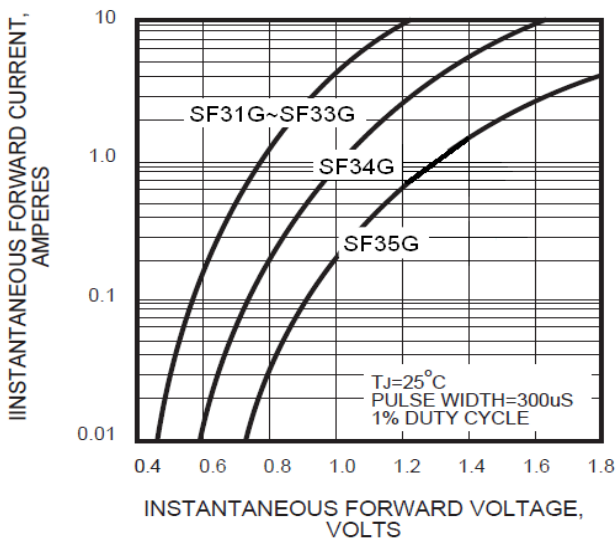


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

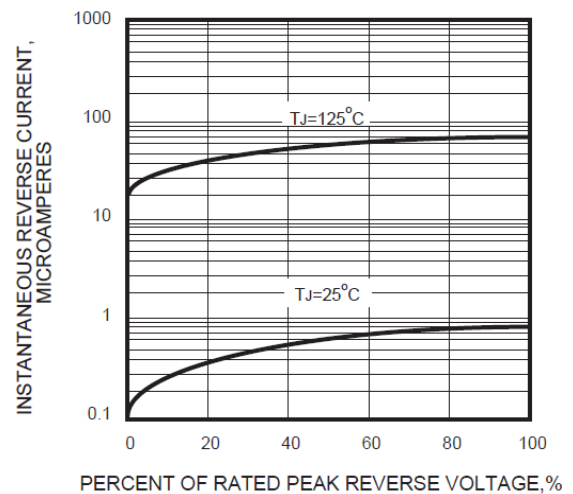


FIG.5 - TYPICAL JUNCTION CAPACITANCE

