

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

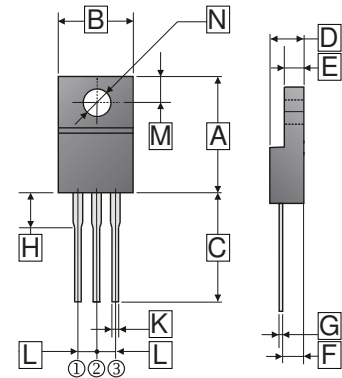
FEATURES

- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability

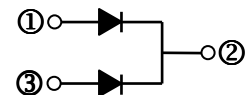
MECHANICAL DATA

- Case : Molded plastic ITO-220Y
- Epoxy : UL 94V-0 rate flame retardant
- Terminals : Solderable per MIL-STD-202 method 208 guaranteed
- Polarity : Color band denotes cathode
- Mounting position : Any
- Weight : 1.73 grams

ITO-220Y



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.80	15.20	G	0.30	0.70
B	9.50	10.50	H	3.50	3.41
C	12.40	14.30	K	0.50	0.65
D	4.30	4.70	L	2.35	2.70
E	2.80	3.20	M	2.50	2.80
F	2.40	2.90	N	φ 3.2	φ 3.6



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, de-rate current by 20%.)

Parameters	Symbol	Part Number				Unit
		SFG20ED100F	SFG20ED200F	SFG20ED400F	SFG20ED600F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	V
Maximum Average Forward Rectified Current $T_C=125^\circ\text{C}$	$I_{F(AV)}$	20				A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200		175		A
Maximum Instantaneous Forward Voltage @ 10.0A	V_F	0.95		1.25	1.7	V
Maximum DC Reverse Current	I_R	10				μA
At Rated DC Blocking Voltage		500				
Maximum Reverse Recovery Time ¹	T_{RR}	25			35	nS
Typical Junction Capacitance ²	C_J	120		70		pF
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150				°C

Notes :

1. Reverse recovery test conditions $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATINGS AND CHARACTERISTICS CURVE

FIG.1 - FORWARD CURRENT DERATING CURVE

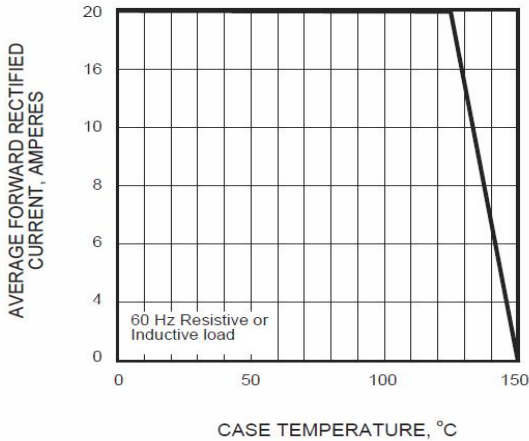


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

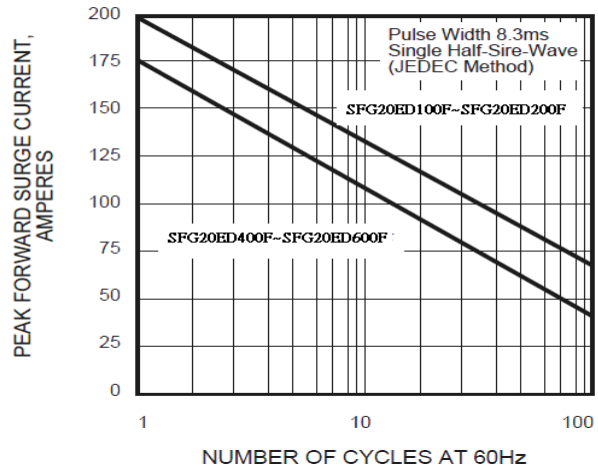


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

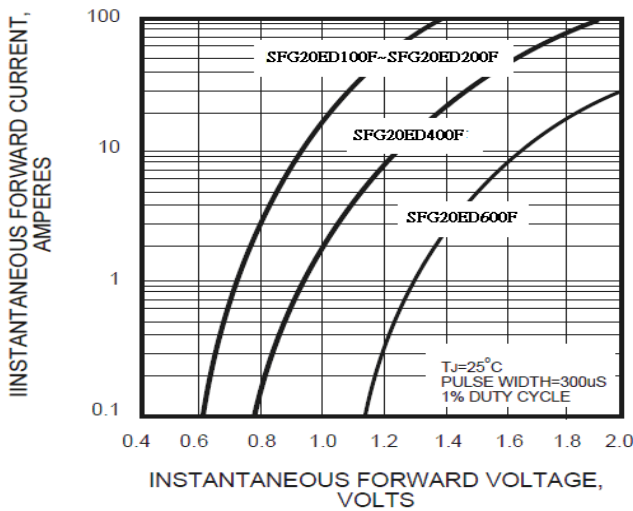


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

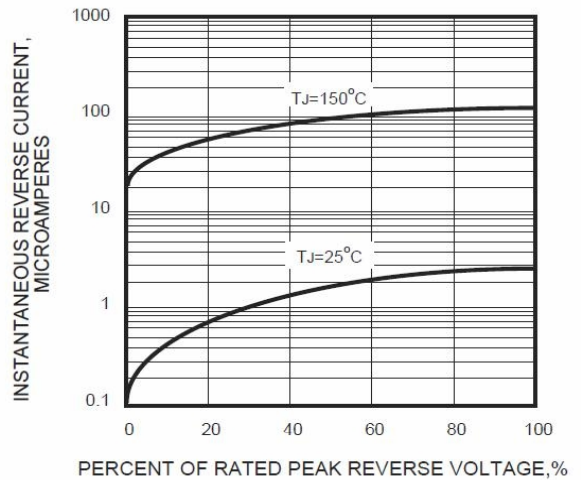


FIG.5 - TYPICAL JUNCTION CAPACITANCE

