

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

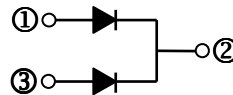
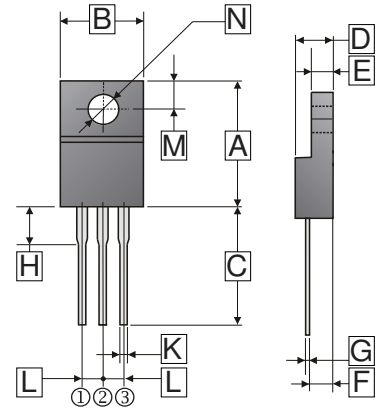
FEATURES

- 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
- Polarity : Color band denotes cathode
- Mounting position : Any
- Weight : 1.81 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
		SFG 20SD50F	SFG 20SD100F	SFG 20SD200F	SFG 20SD300F	SFG 20SD400F	SFG 20SD600F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	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	0.975			1.3		1.5	V
Maximum DC Reverse Current	I_R	10						μA
At Rated DC Blocking Voltage		250						
Maximum Reverse Recovery Time ¹	T_{RR}	35			50			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 $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$. Measured at 10 MHz and applied reverse voltage of 4.0 Volts DC.
2. Thermal Resistance junction to case.
3. Thermal Resistance junction to case.

Any changes of specification will not be informed individually.

RATINGS AND CHARACTERISTICS CURVE

FIG.1 - FORWARD CURRENT DERATING CURVE

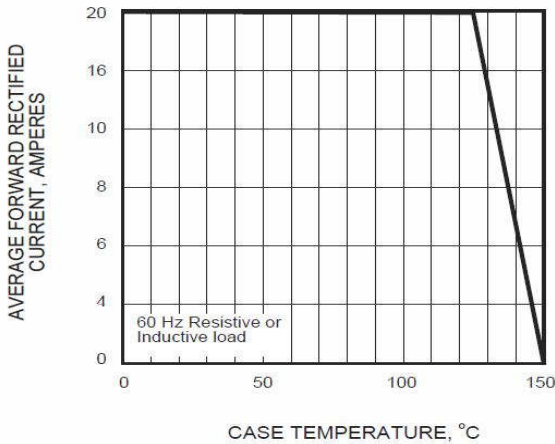


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

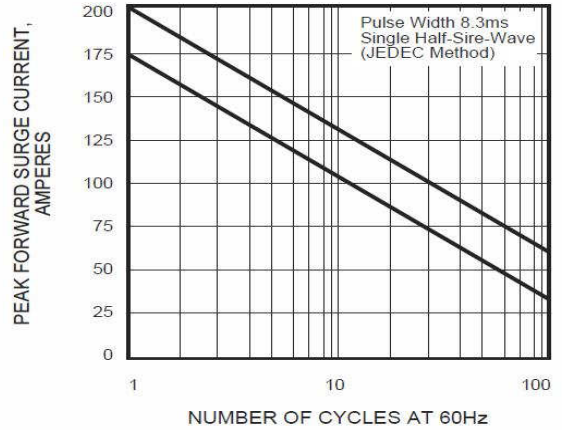


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

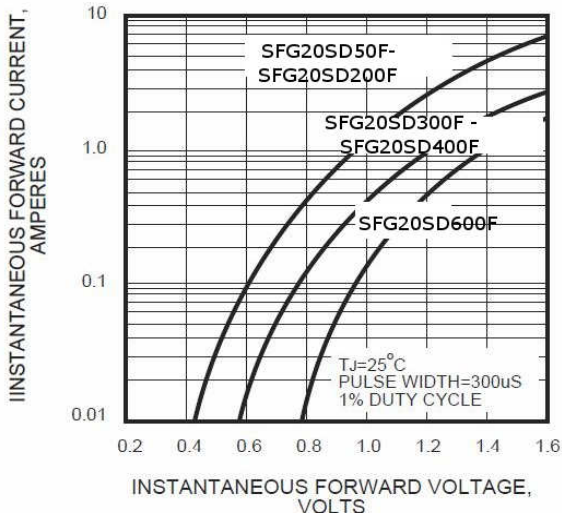


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

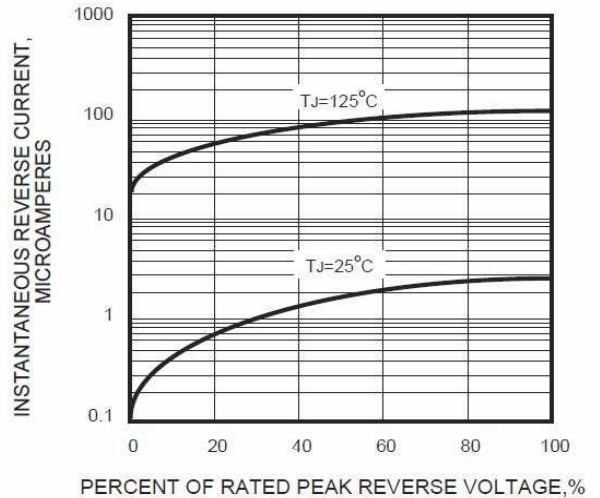


FIG.5 - TYPICAL JUNCTION CAPACITANCE

