

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

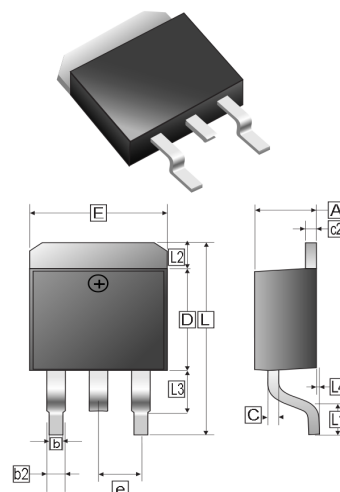
FEATURES

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

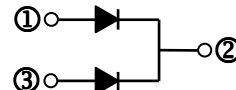
MECHANICAL DATA

- Case : Molded plastic TO-236
- Epoxy : UL 94V-0 rate flame retardant
- Terminals : Solderable per MIL-STD-202 method 208 guaranteed
- Mounting position : Any
- Weight : 1.70 grams

TO-263



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.85	c2	1.10	1.45
b	0.68	1.00	b2	1.34	REF
L4	0.00	0.30	D	8.0	9.15
C	0.36	0.53	e	2.54	REF
L3	1.50	REF	L	14.6	15.85
L1	2.29	2.79	L2	1.27	REF
E	9.60	10.45			



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
			SFG10ED200D	SFG10ED400D	SFG10ED600D	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	200	400	600	V
Maximum RMS Voltage		V _{RMS}	140	280	420	V
Maximum DC Blocking Voltage		V _{DC}	200	400	600	V
Maximum Average Forward Rectified Current T _L =100°C		I _{F(AV)}	10.0			A
Peak Forward Surge Current,8.3ms single Half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	100			A
Maximum Instantaneous Forward Voltage @ 5.0A		V _F	0.95	1.25	1.85	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _J =25°C	I _R	10			μA
	T _J =125°C		250			
Maximum Reverse Recovery Time ¹		T _{RR}	25			nS
Typical Junction Capacitance ²		C _J	65			pF
Typical Thermal Resistance ³		R _{θJC}	2.2			°C W
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.
3. Thermal Resistance junction to lead.

RATINGS AND CHARACTERISTICS CURVE

FIG.1 - FORWARD CURRENT DERATING CURVE

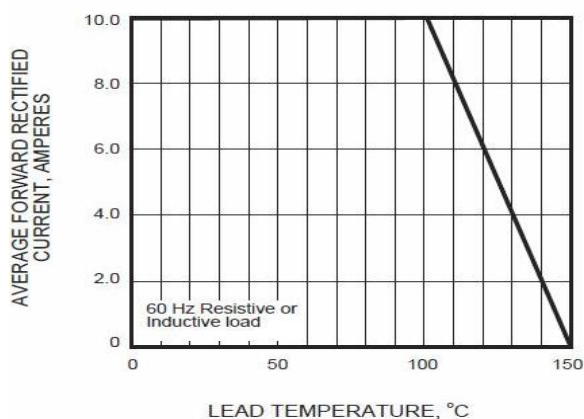


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

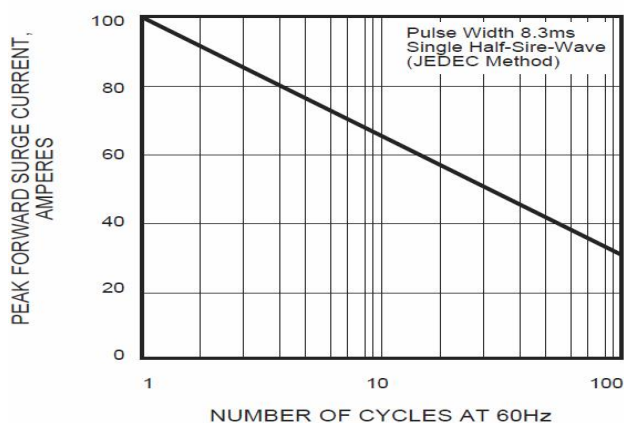


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

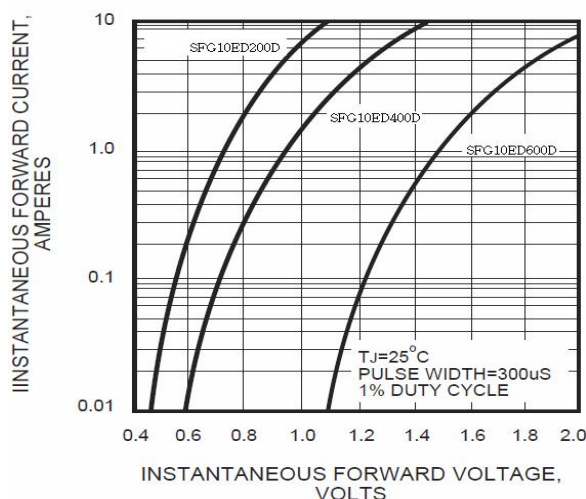


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

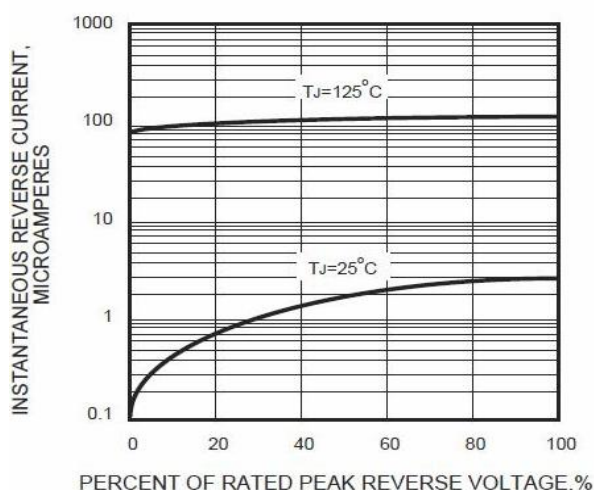


FIG.5 - TYPICAL JUNCTION CAPACITANCE

