Elektronische Bauelemente

SFG10ED200D~ SFG10ED600D

Voltage 200V ~ 600V

10.0 Amp Super Fast Recovery Rectifier

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

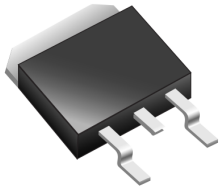
FEATURES

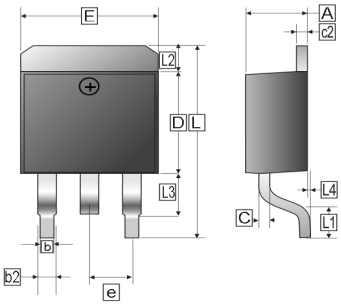
- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability

MECHANICAL DATA

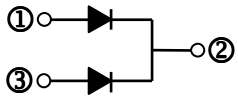
- Case：Molded plastic TO-236
- Epoxy：UL 94V-0 rate flame retardant
- Terminals：Solderable per MIL-STD-202 method 208 guranteed
- Mounting position：Any
- Weight：1.70 grams

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]		$R_{\theta JC}$	2.2			℃ W
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-55~150			℃

Notes：

1. Reverse recovery test conditions I_F= 0.5A, I_R= 1.0A, I_{RR}= 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
3. Thermal Resistance junction to lead.

Elektronische Bauelemente

SFG10ED200D~ SFG10ED600D

Voltage 200V ~ 600V

10.0 Amp Super Fast Recovery Rectifier

RATINGS AND CHARACTERISTICS CURVE

FIG.1 - FORWARD CURRENT DERATING CURVE

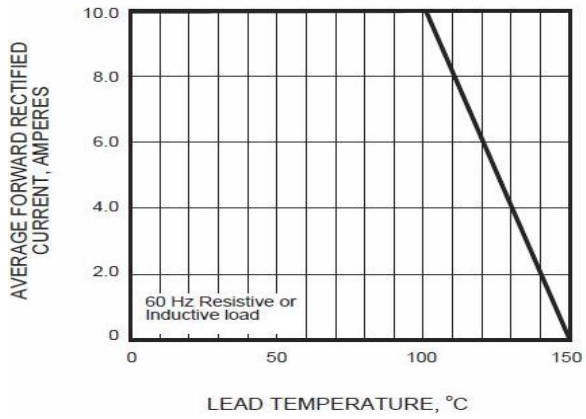


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

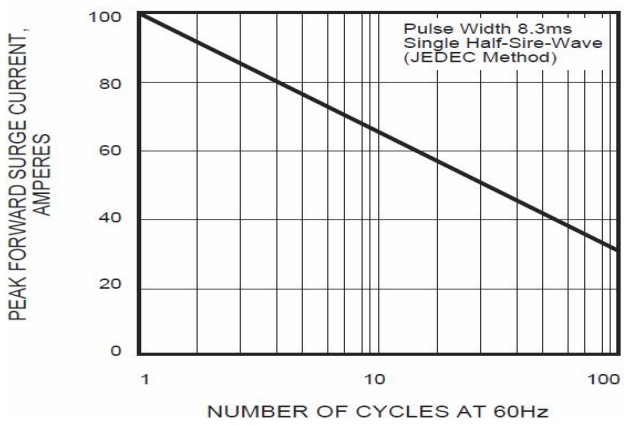


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

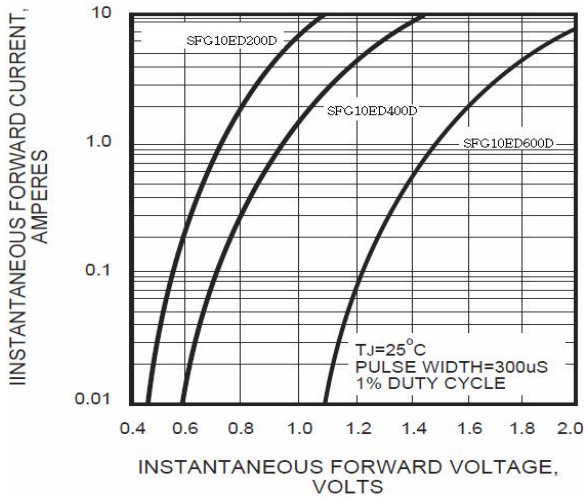


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

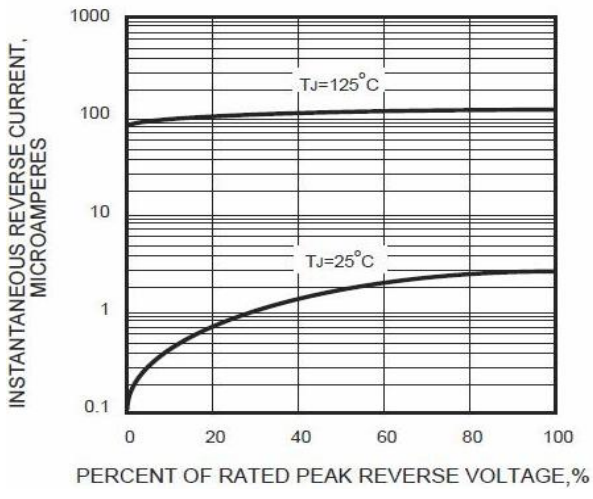


FIG.5 - TYPICAL JUNCTION CAPACITANCE

