LITE-ON SEMICONDUCTOR

SF10BG thru SF10JG

SUPER FAST
GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE **- 100** to **600** Volts
FORWARD CURRENT **- 1.0** Ampere

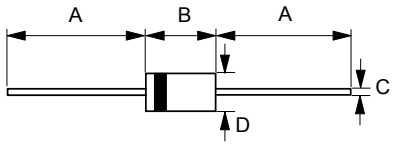
FEATURES

- Glass passivated chip
- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

DO-41



	DO-41	
Dim.	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.71 ∅	0.86 ∅
D	2.00 ∅	2.70 ∅
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	SF10BG	SF10DG	SF10FG	SF10GG	SF10HG	SF10JG	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current @T_A=75℃	$I_{(AV)}$	1.0						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I_{FSM}	30						A
Maximum forward Voltage at 1.0A DC	V_F	0.95		1.25		1.3		V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5 100						uA
Typical Junction Capacitance (Note1)	C_J	30				25		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40						°C/W
Maximum Reverse Recovery Time (Note 3)	T_{RR}	35		40		50		ns
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Ambient.
3.Measured with I_F=0.5A,I_R=1.0A,I_{RR}=0.25A.

REV. 3, Sep-2010, KDGC01

FIG.1 - FORWARD CURRENT DERATING CURVE

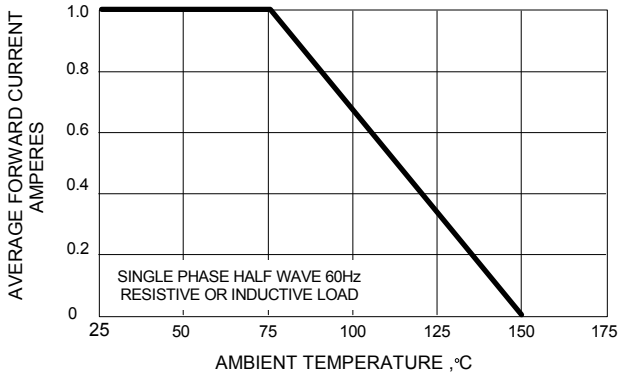


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

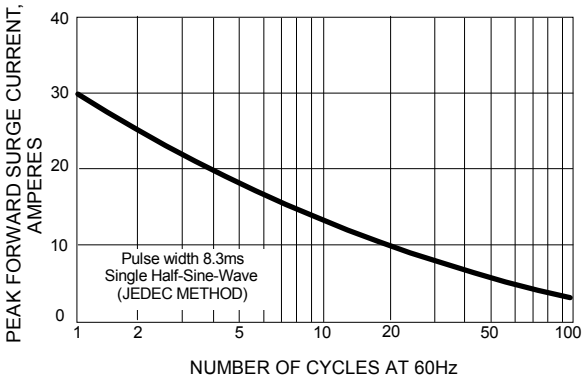


FIG.3 - TYPICAL JUNCTION CAPACITANCE

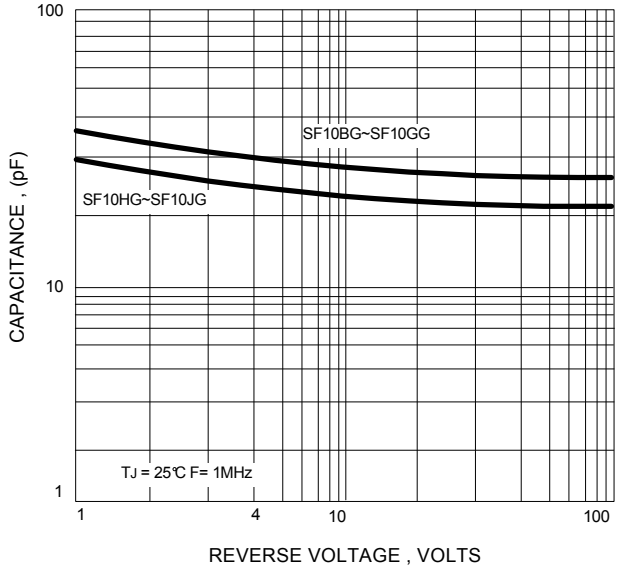
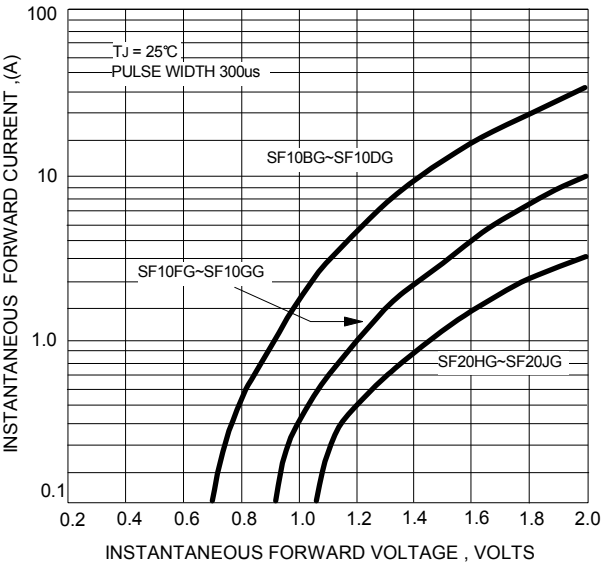


FIG.4 - TYPICAL FORWARD CHARACTERISTICS



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