LITE-ON SEMICONDUCTOR

SF40BG thru SF40JG

SUPER FAST
GLASS PASSIVATED RECTIFIERS

REVERSE VOLTAGE **- 100** to **600** Volts
FORWARD CURRENT **- 4.0** Amperes

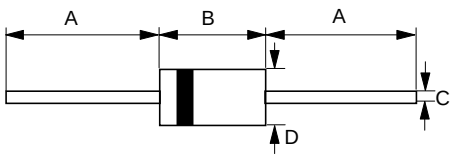
FEATURES

- 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-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- Mounting position : Any

DO-201AD



	DO-201AD	
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SF40BG	SF40DG	SF40FG	SF40GG	SF40HG	SF40JG	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=55˚C	$I_{(AV)}$	4.0						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	150						A
Maximum forward Voltage at 4.0A DC	V_F	0.95		1.25		1.3		V
Maximum DC Reverse Current @T_J=25˚C at Rated DC Blocking Voltage @T_J=100˚C	I_R	5 100						uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35		40		50		ns
Typical Junction Capacitance (Note 2)	C_J	80				60		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	15						˚C/W
Operating Temperature Range	T_J	-55 to +150						˚C
Storage Temperature Range	T_{STG}	-55 to +150						˚C

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

REV. 2, 01-Dec-2000, KDGF02

FIG.1 - FORWARD CURRENT DERATING CURVE

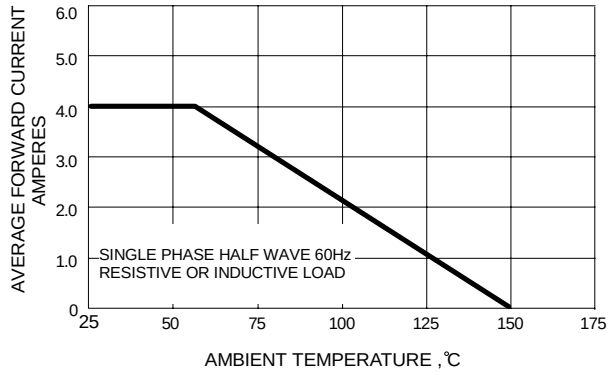


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

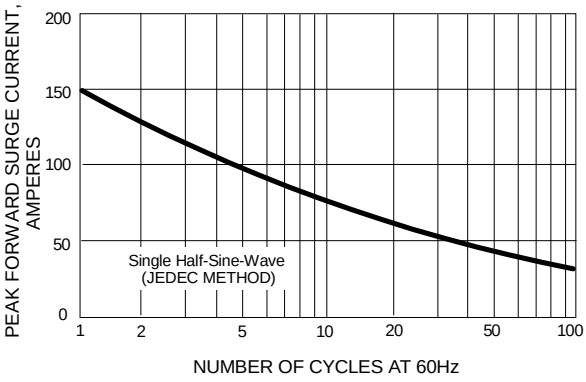


FIG.3 - TYPICAL JUNCTION CAPACITANCE

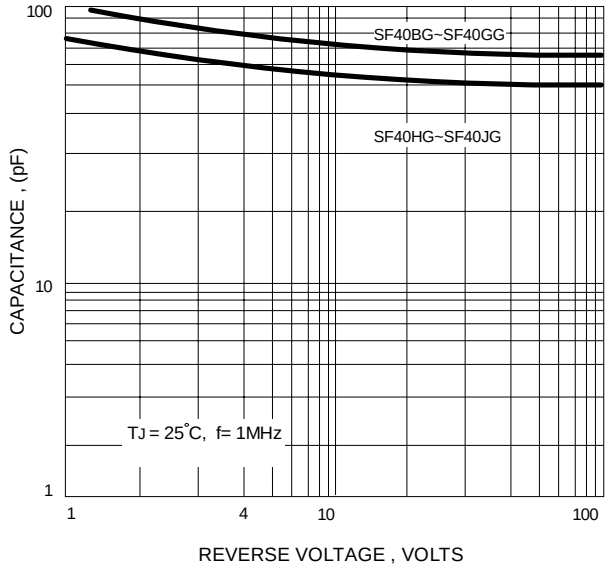


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

