

**SUPER FAST  
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - 100 to 600 Volts  
FORWARD CURRENT - 5.0 Amperes

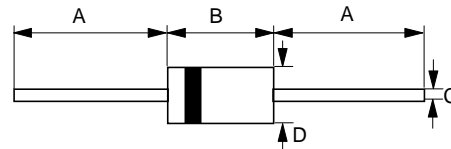
**FEATURES**

- 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		

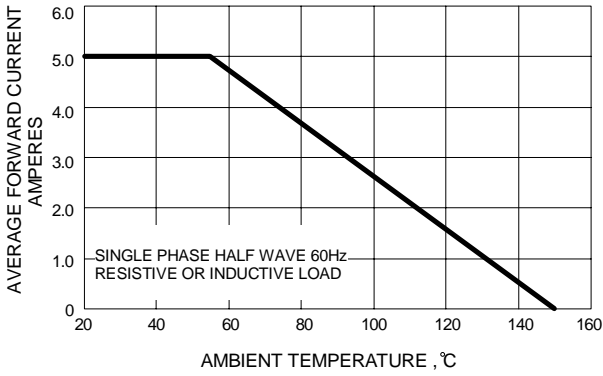
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

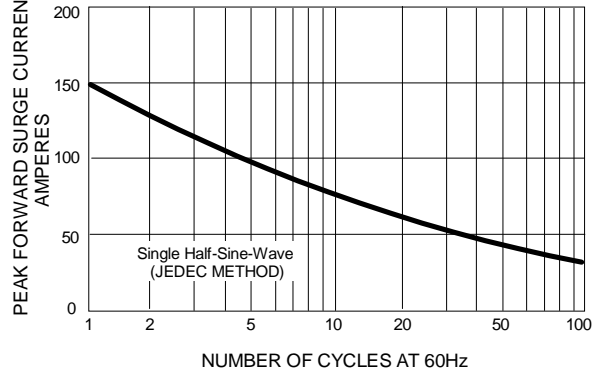
CHARACTERISTICS	SYMBOL	SF50BG	SF50DG	SF50FG	SF50GG	SF50HG	SF50JG	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	200	300	400	500	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	300	400	500	400	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =55°C	I <sub>(AV)</sub>	5.0						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	150						A
Maximum forward Voltage at 5.0A DC	V <sub>F</sub>	0.95		1.25		1.3		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	5 300						uA uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	35		40		50		ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	80				60		pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	13						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150						°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C

NOTES : 1.Measured with I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A.  
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3.Thermal Resistance Junction to Ambient.

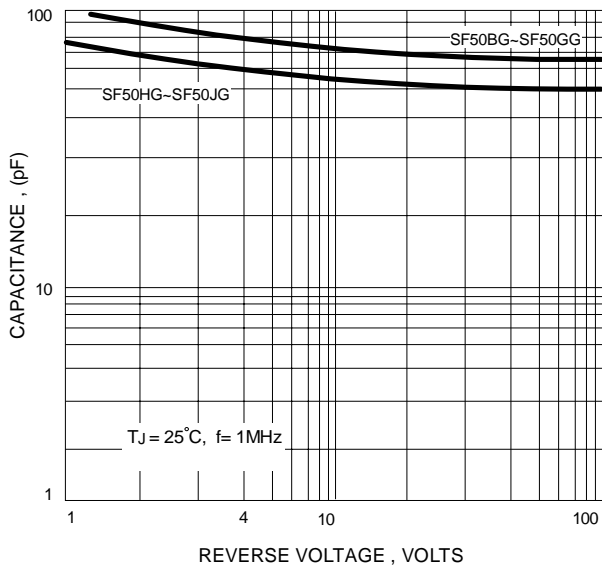
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL JUNCTION CAPACITANCE**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**

