



TAYCHIPST

SUPER-FAST GLASS PASSIVATED RECTIFIER

SF50BG THRU SF50JG

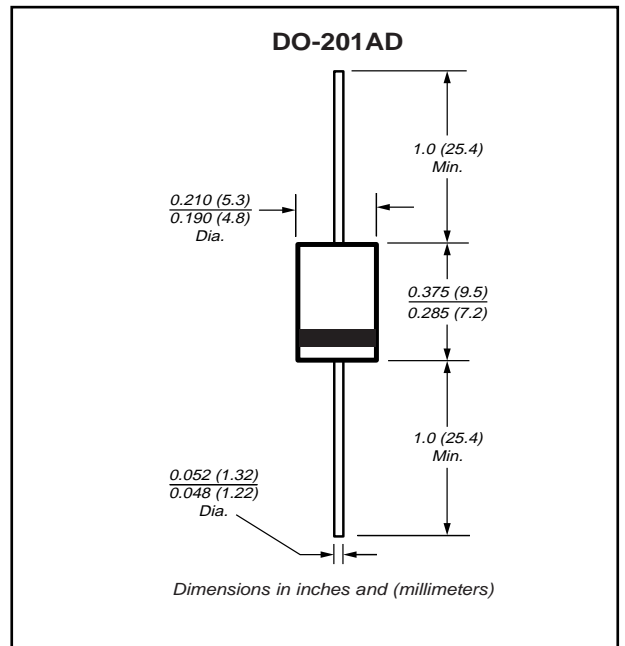
100V-600V 5.0A

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



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 _{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	400	V
Maximum Average Forward Rectified Current @T _A =55°C	I _(AV)	5.0						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 5.0A DC	V _F	0.95		1.25		1.3		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5 300						uA 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 _{θJA}	13						°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.



FIG.1 - FORWARD CURRENT DERATING CURVE

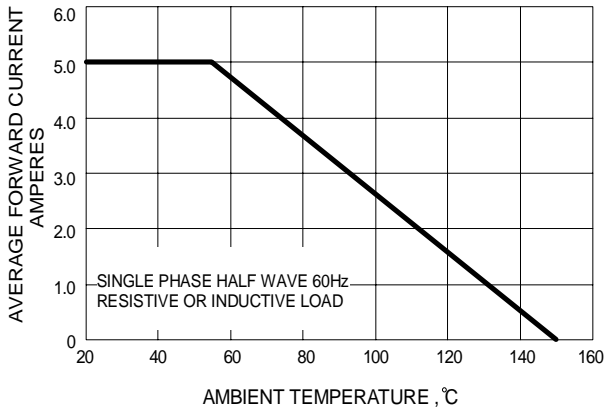


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

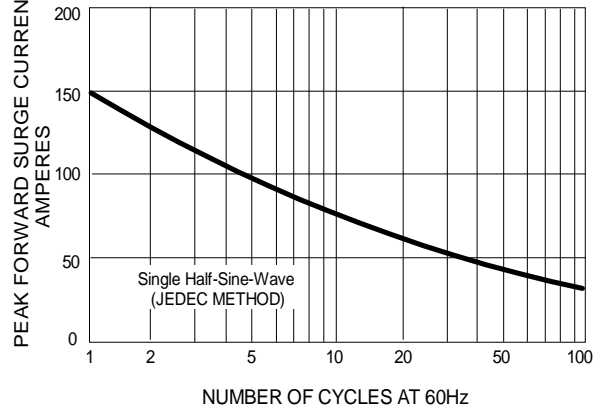


FIG.3 - TYPICAL JUNCTION CAPACITANCE

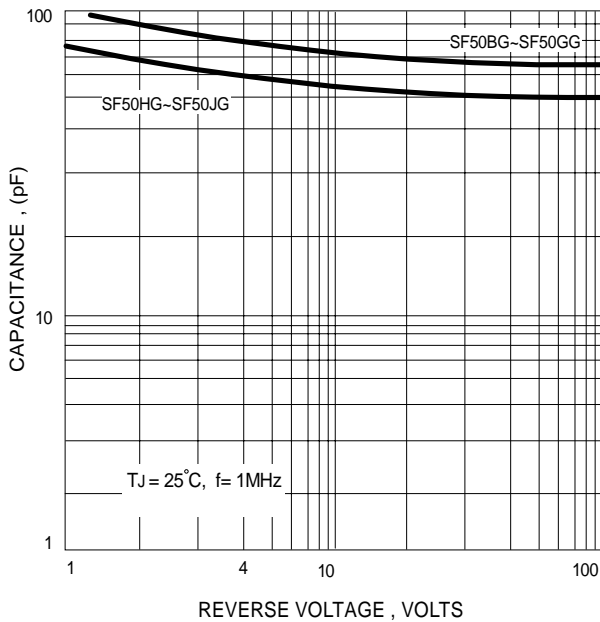


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

