

SUPER FAST RECTIFIERS

REVERSE VOLTAGE - **50** to **600** Volts
FORWARD CURRENT - **2.0** Amperes

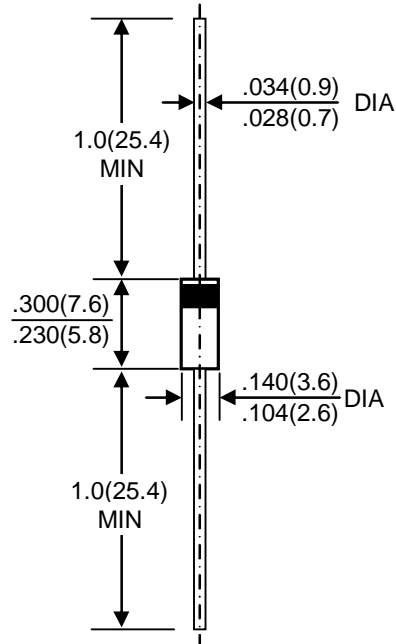
FEATURES

- 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-15 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.0415ounces ,0.4grams
- Mounting position: Any

DO-15



Dimensions in inches and (millimeters)

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, derate current by 20%

CHARACTERISTICS	SYMBOL	SF21	SF22	SF23	SF24	SF25	SF26	SF28	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V	
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V	
Maximum Average Forward Rectified Current @ T _A =55 °C	I(AV)	2.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	50							A	
Peak Forward Voltage at 2.0A DC	V _F	0.95			1.3		1.7		V	
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =100°C	I _R	5.0							100	μA
Maximum Reverse Recovery Time(Note 1)	T _{rr}	35							nS	
Typical Junction Capacitance (Note2)	C _J	40			30				pF	
Typical Thermal Resistance (Note3)	R _{θJA}	25							°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=1A,I_{RR}=0.25A.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient.

REV. 1, 30-Dec-2011

FIG. 1 – FORWARD CURRENT DERATING CURVE

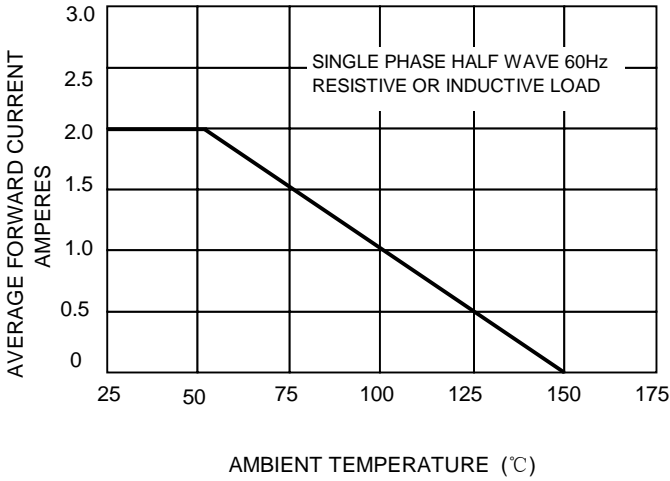


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

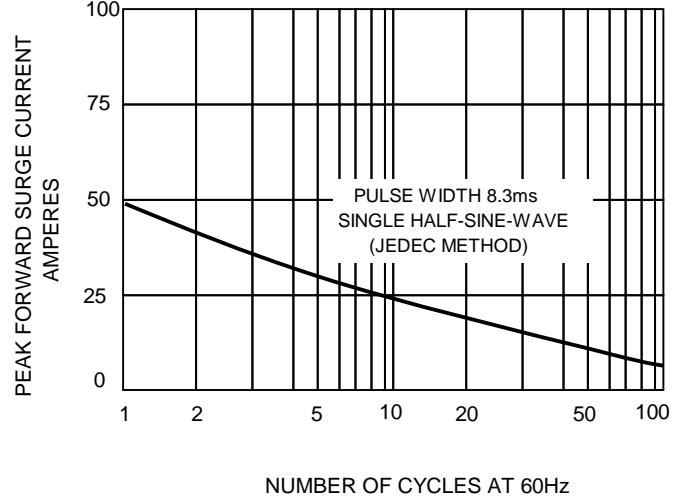


FIG.3 – TYPICAL JUNCTION CAPACITANCE

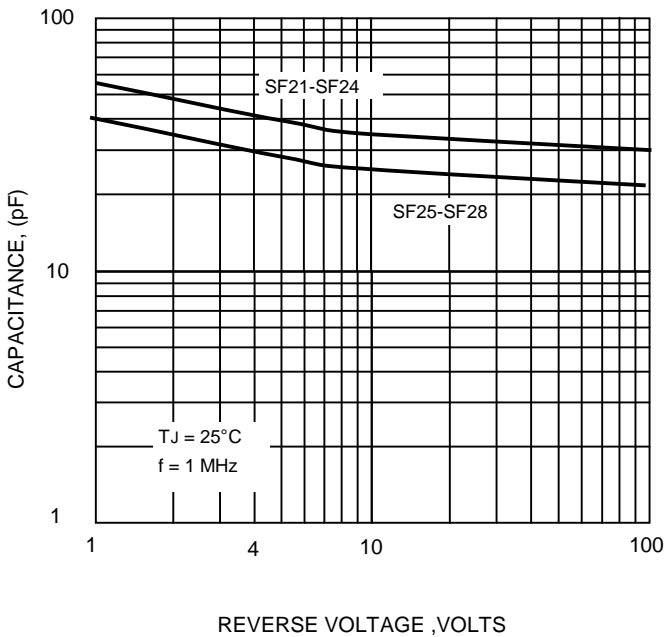


FIG.4-TYPICAL FORWARD CHARACTERISTICS

