

Surface Mount Super Fast Glass Passivated Rectifier



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	: Molded Plastic
Polarity	: Colour band denotes cathode
Weight	: 0.003 ounces, 0.093 grams
Mounting Position	: Any
Reverse Voltage	: 50 to 600 Volts
Forward Current	: 2 Amperes

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	ES2A	ES2B	ES2D	ES2G	ES2J	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Max. RMS Voltage	V_{RMS}	35	70	140	280	420	V
Max. DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Max. Average Forward Rectified Current @ $T_A = 50^\circ C$	$I_{(AV)}$	2					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 2A DC	V_F	0.95			1.3	1.7	V
Maximum DC Reverse Current @ $T_J = 25^\circ C$ at Rated DC Blocking Voltage @ $T_J = 100^\circ C$	I_R	5 100					μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35					nS
Typical Junction Capacitance (Note 2)	C_J	40			30		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	25					$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150					$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150					$^\circ C$

- Notes :**
1. Measured with $I_F = 0.5A$, $I_R = 1A$, $I_{RR} = 0.25A$
 2. Measured at 1MHz and applied reverse voltage of 4V DC
 3. Thermal resistance junction to lead
 4. The typical data above is for reference only

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Rating and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

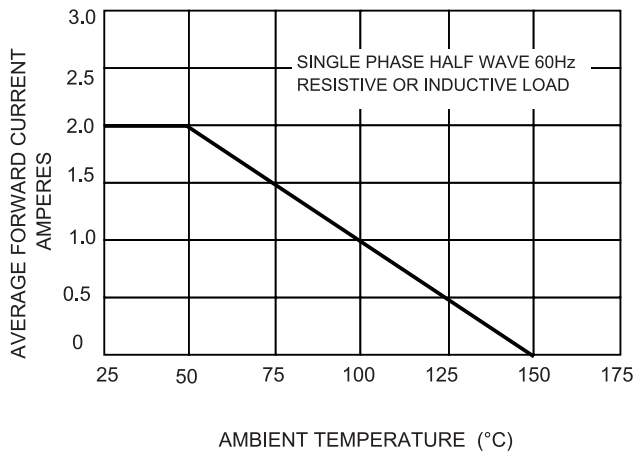


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

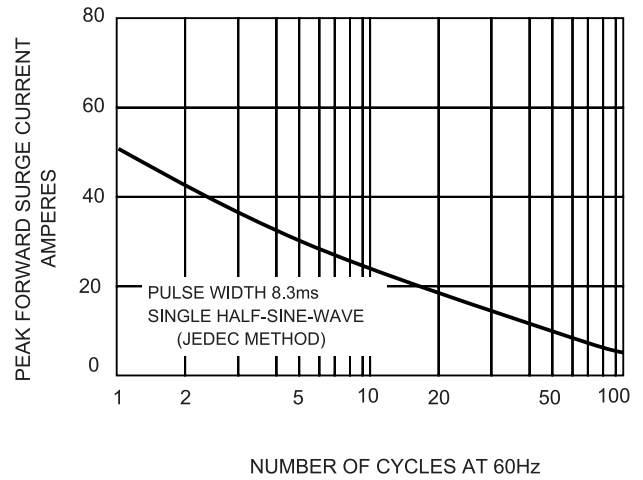


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

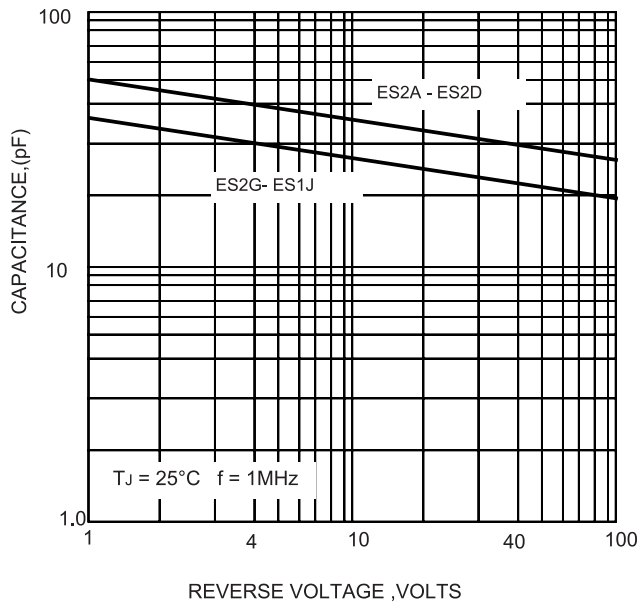
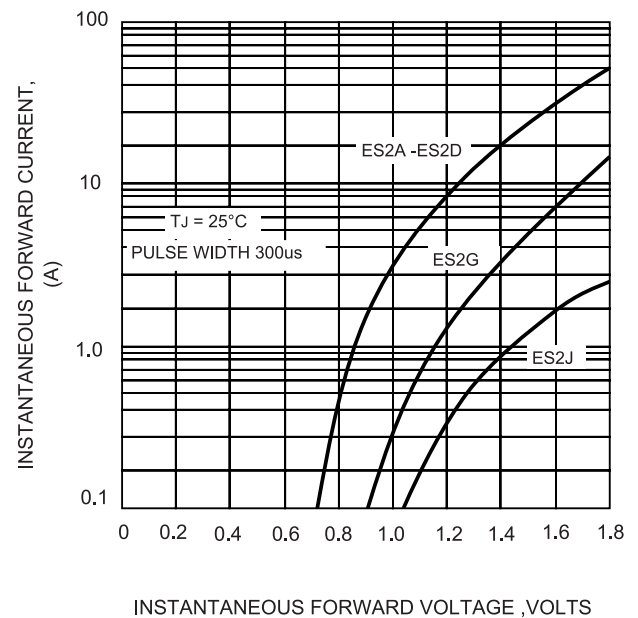


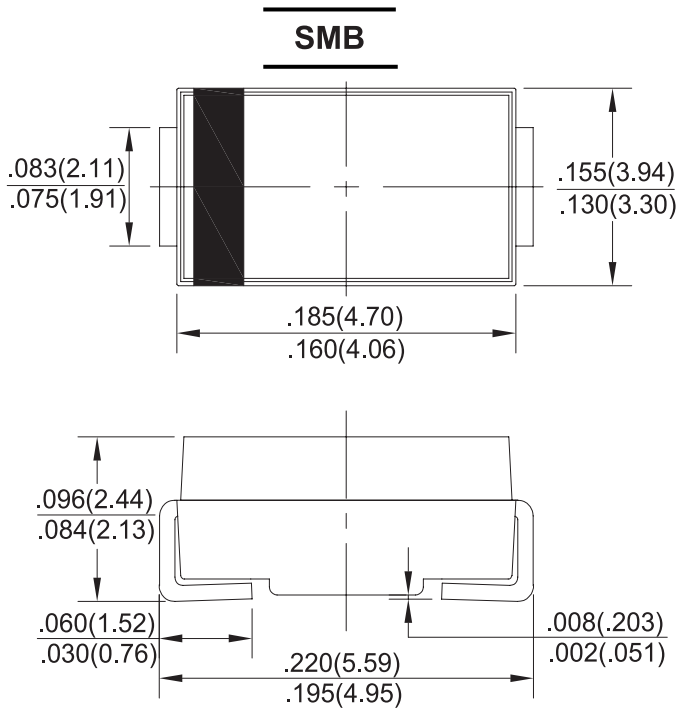
FIG. 4-TYPICAL FORWARD CHARACTERISTICS



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Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Super Fast Glass Passivated Rectifiers	ES2A
	ES2B
	ES2D
	ES2G
	ES2J

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