Surface Mount Super Fast
Glass Passivated Rectifer

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	: 0.007 ounces,0.21 grams
Mounting Position	: Any
Reverse Voltage	: 50 to 600 Volts
Forward Current	: 3 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	ES3B	ES3D	ES3G	ES3J	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	50	200	400	600	V
Max. RMS Voltage	V_{RMS}	35	140	280	420	V
Max. DC Blocking Voltage	V_{DC}	50	200	400	600	V
Max. Average Forward Rectified Current @T_A = 50°C	$I_{(AV)}$	3				A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	100				A
Peak Forward Voltage at 3A 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	5 100				μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35				nS
Typical Junction Capacitance (Note 2)	C_J	70		45		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	20				°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 1MHz and applied reverse voltage of 4V DC
3. Thermal resistance junction to lead
4. The typical data above is for reference only

Rating and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

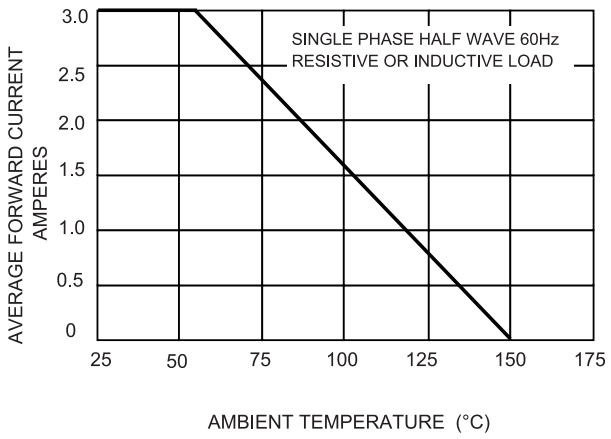


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

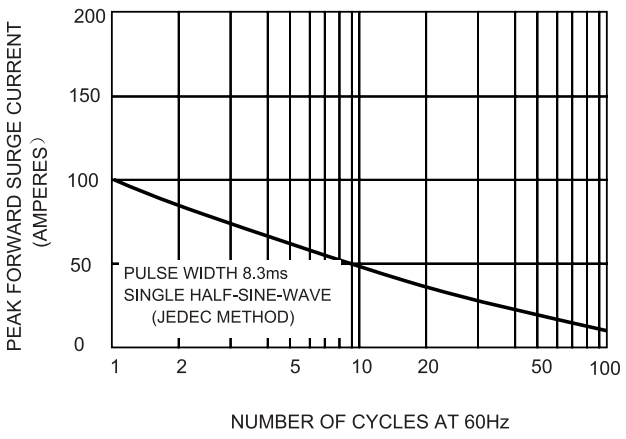


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

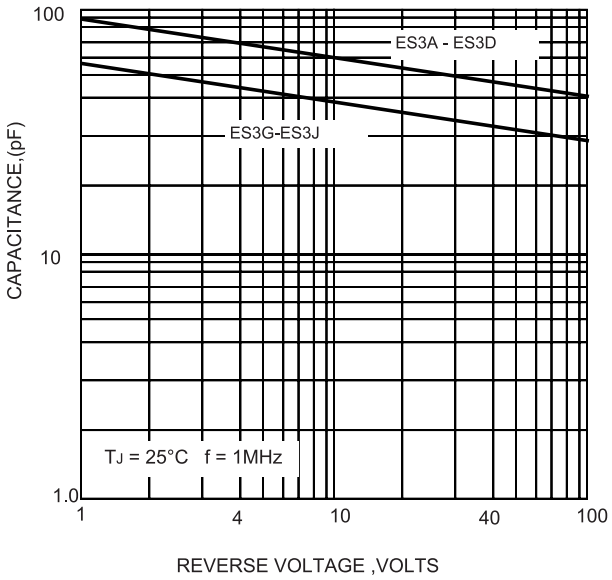
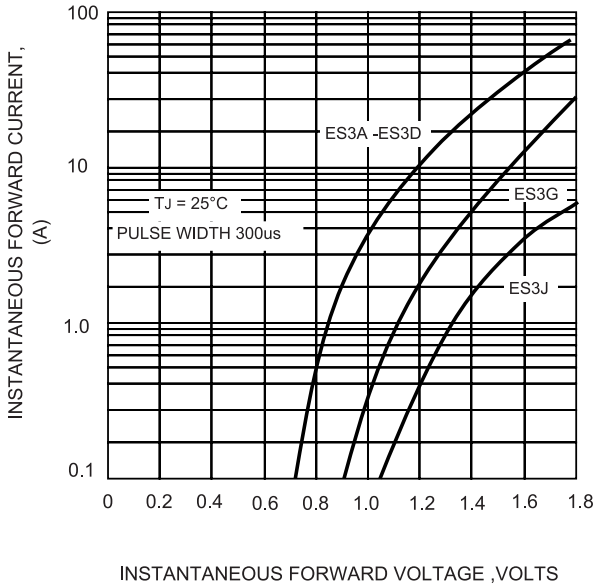


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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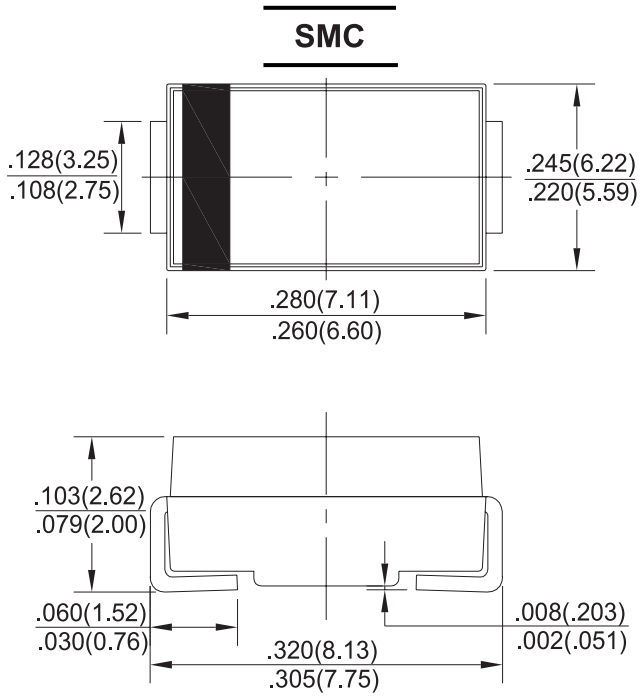
Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

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