

Surface Mount Super Fast Glass Passivated Rectifier

multicomp PRO



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+	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	50	200	400	V
Max. RMS Voltage	V _{RMS}	35	140	280	V
Max. DC Blocking Voltage	V _{DC}	50	200	400	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	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 _{θJL}	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

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Rating and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

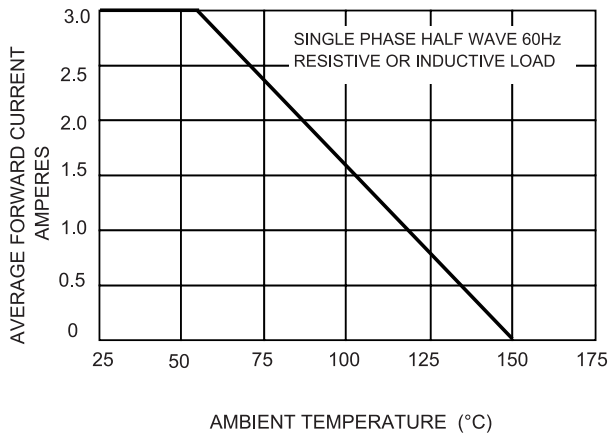


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

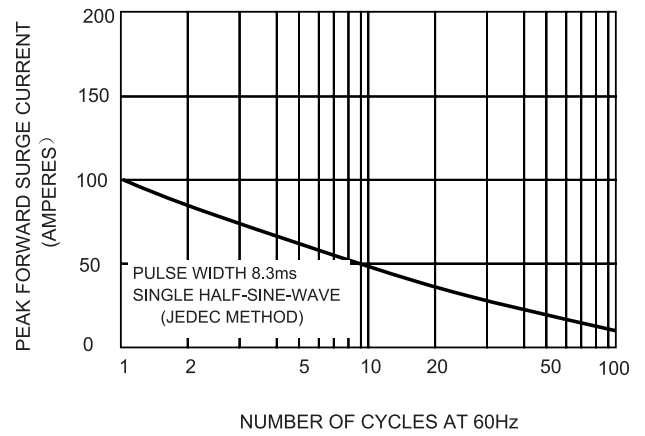


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

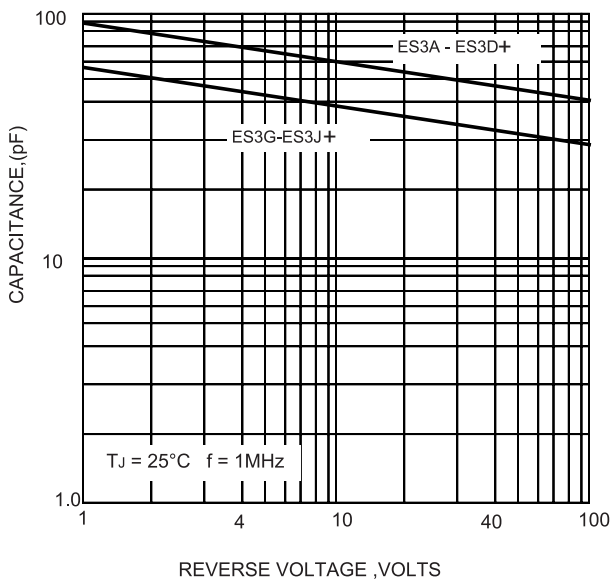
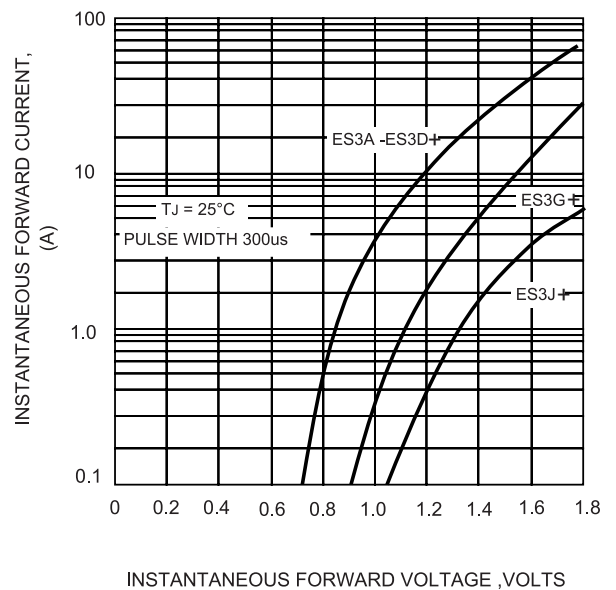


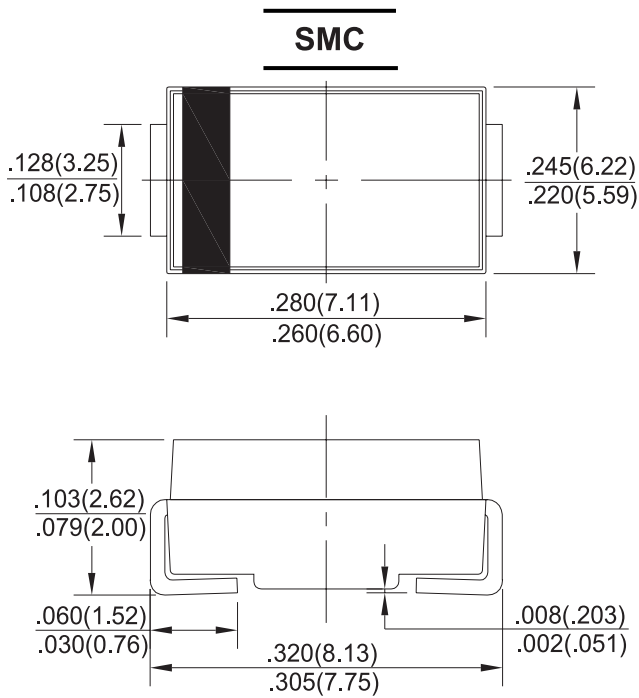
FIG.4-TYPICAL FORWARD CHARACTERISTICS



Surface Mount Super Fast Glass Passivated Rectifier



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Super Fast Glass Passivated Rectifiers	ES3B+
	ES3D+
	ES3G+

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