



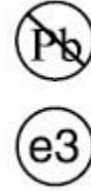
## Surface Mount Glass Passivated Rectifier

### Features

- Plastic package has UL flammability classification 94V-0
- Glass passivated chip junction
- Built in strain relief
- Super fast switching speed for high efficiency
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length
- RoHS and REACH Compliance



DO-214AA (SMB)



### Mechanical Data

<b>Case:</b>	JEDEC DO-214 A transfer molded plastic
<b>Polarity:</b>	Color band denots cathode end
<b>Terminal:</b>	Solder plated, solderable per MIL-STD 750, Method 2026
<b>Weight:</b>	0.003 ounce, 0.093 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

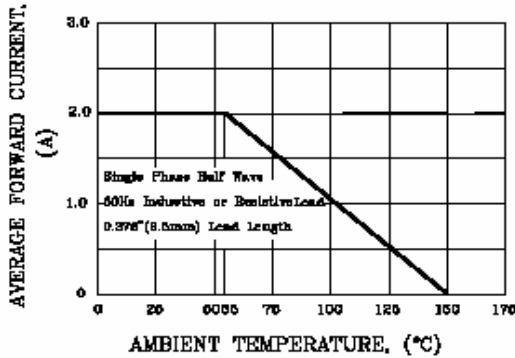
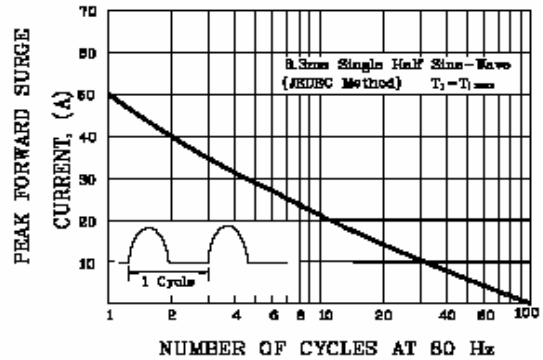
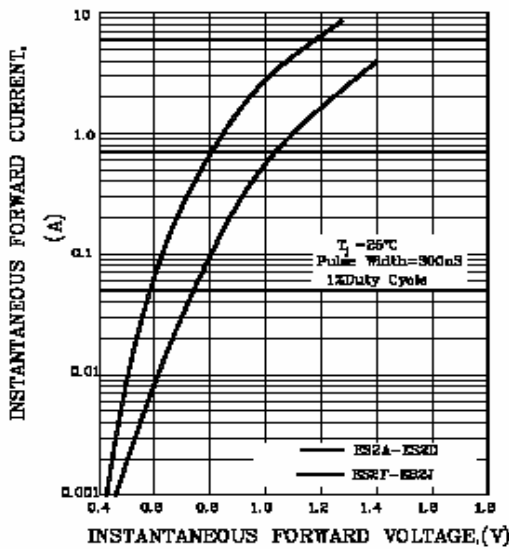
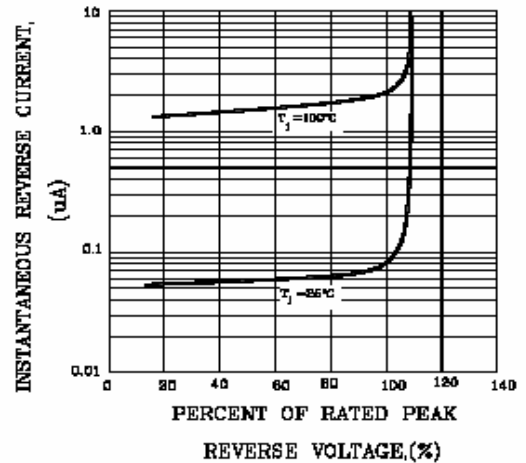
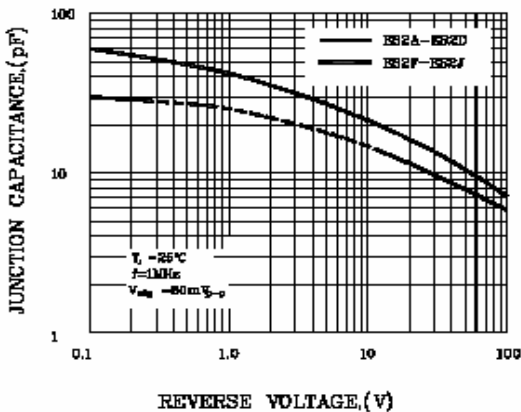
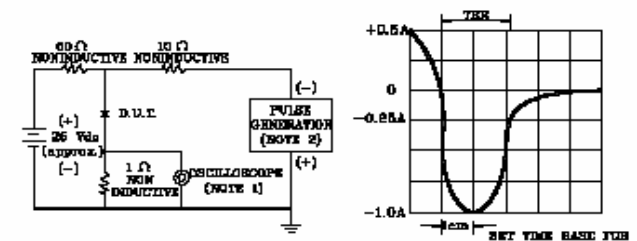
Symbol	Description	ES2A	ES2B	ES2C	ES2D	ES2F	ES2G	ES2J	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V	
VRMS	Max RMS Voltage	35	70	105	140	210	280	420	V	
VDC	Max DC Blocking Voltage	50	100	150	200	300	400	600	V	
I(AV)	Max Average Forward Rectified Current	2.0							A	TA=55°C Note 2
IFSM	Peak Forward Surge Current	50							A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150, -55 to +150							°C	
Rθ-JA	Typical Thermal Resistance	75							°C/W	Note 2
Rθ-JL		17								

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	ES2A	ES2B	ES2C	ES2D	ES2F	ES2G	ES2J	Unit	Conditions
VF	Max Instantaneous Forward Voltage	0.95		1.25		1.7			V	2.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							µA	TA=25°C
		200								TA=125°C
TRR	Maximum reverse recovery time	35							nS	Note 1
CJ	Typical Junction capacitance	25			208				pF	Measured at 1.0MHz / 4.0V

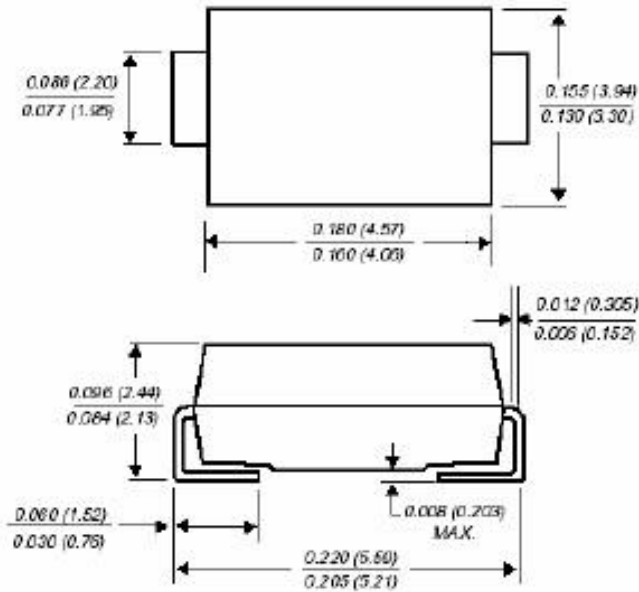
**Note:**

1. Reverse recovery test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.3" x 0.3" (8.0 x 8.0mm) copper pad areas.

**ES2A ~ ES2J**
**RATINGS AND CHARACTERISTIC CURVES ES2A THRU ES2J**
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**

**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

**FIG.5-TYPICAL JUNCTION CAPACITANCE**

**FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**


NOTES: 1. Rise Time =  $V_{in}$  max. Input Impedance = 1 megohm, 22pF  
2. Rise time = 10ns max. Source Impedance = 50 ohms

Dimensions in inches (mm)



Dimensions in inches and (millimeters)

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