



SURFACE MOUNT GLASS PASSIVATED RECTIFIER ES2AA ~ ES2MA

Surface Mount Glass Passivated Rectifier

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- High temperature soldering guaranteed 265°C /5 seconds
260°C/ 10 seconds
- Super fast switching speed for high efficiency
- RoHS and REACH compliance



DO-214AC (SMA)



RoHS
COMPLIANT

Mechanical Data

Case:	DO-214AC, transfer molded plastic
Epoxy:	Meets UL 94V-0 flammability rating
Terminals:	Solder plated, solderable per MIL-STD 750, Method 2026
Polarity:	Cathode indicated by color band
Mounting position:	Any
Weight:	0.003 Ounce, 0.093 gram

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

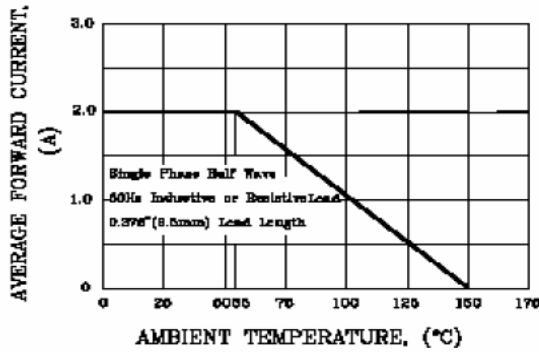
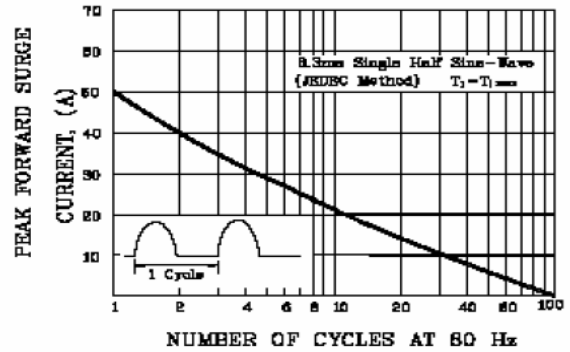
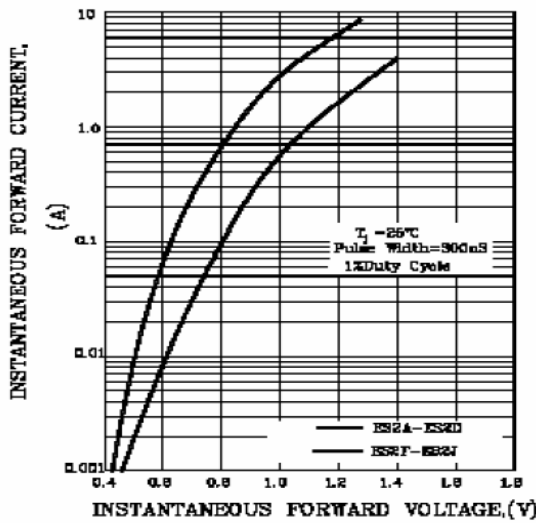
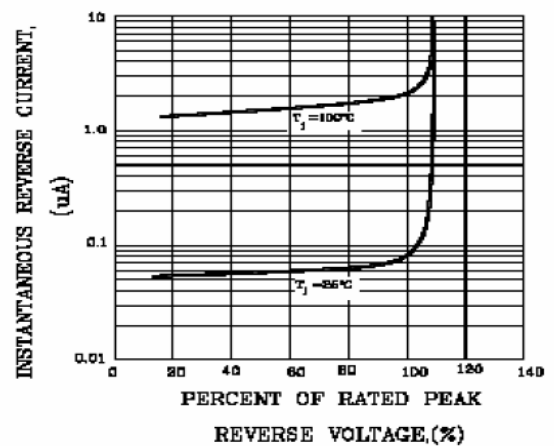
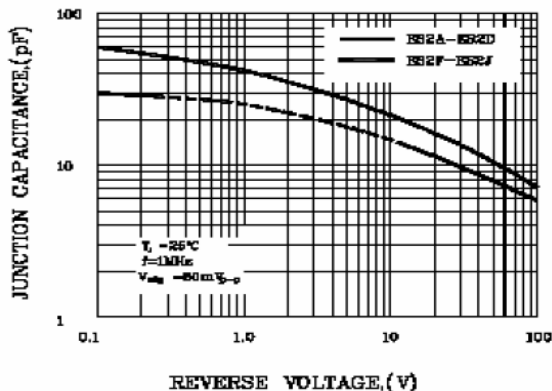
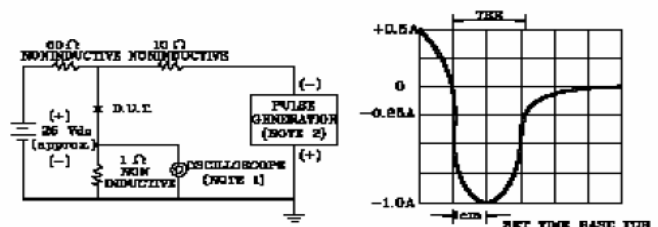
Symbol	Description	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2JA	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	150	200	300	400	600	V	
VRMS	Max RMS Voltage	35	70	105	140	210	280	420	V	
VDC	Max DC Blocking Voltage	50	100	150	200	300	400	600	V	
I(AV)	Max Average Forward Rectified Current	2.0							A	TA=55°C
IFSM	Peak Forward Surge Current	50							A	8.3ms single half sine-wave (JEDEC)
trr	Maximum Reverse Recovery Time	35							nS	IF=0.5A, IR=1.0A, IRR=0.25A
TJ, TSTG	Operating and Storage Temperature Range	-55 to +150							°C	

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

Symbol	Description	ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2JA	Unit	Conditions
VF	Max Instantaneous Forward Voltage	0.95				1.25		1.7	V	IF(AV)= 2.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							µA	TA=25°C
		200								TA=125°C
CJ	Typical Junction Capacitance	25				208			pF	At 1MHz, reversed voltage of 4V
Rθ-JA	Typical Thermal Resistance	75							°C/W	Note 2
Rθ-JL		17								

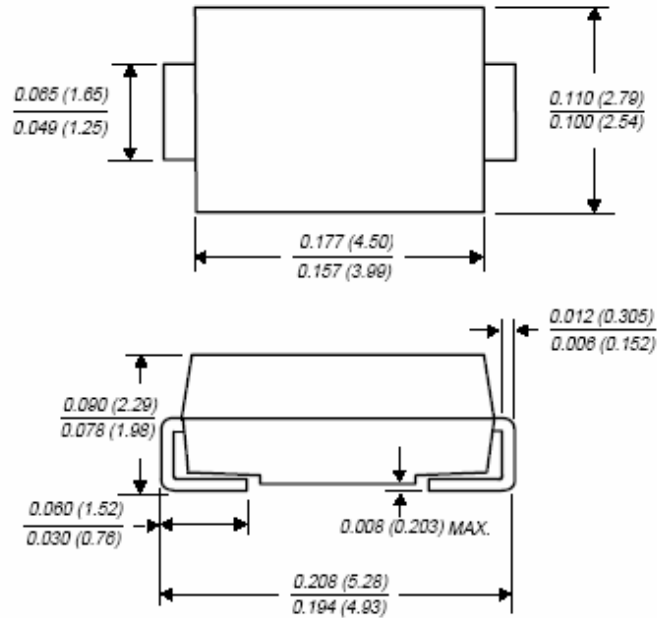
Note:

1. Single phase, half wave, 60Hz, resistive or inductive load. Derate current by 20% for capacitive load
2. Thermal resistance from junction to ambient at .375" (9.5mm) lead length, PCB mounted

Typical Characteristics Curves
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 = 7ns max. Input Impedance = 1 megohm. 22pF
 2. Rise time=10ns max. Source Impedance= 50 ohms

Dimensions in inch (mm)

*Dimensions in inches and (millimeters)***DO-214AC(SMA)****Contact us:****US HEADQUARTERS****MEI SEMI INC.****2902** Corvin Drive, Santa Clara, CA95051, USA

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