

ES2AA THRU ES2JA

Super Fast Recovery Rectifier Diode

Features

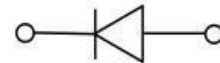
- Ideal for automated placement
- Glass passivated chip junction
- High frequency
- High forward surge capability
- Meets MSL level 1, per J-STD-020,LF maximum peak of 260 °C

Typical Application

For use in high frequency rectification of power supply, inverters, converters, and freewheeling diodes for consumer and telecommunication.

Mechanical Data

- Package: DO-214AC(SMA)
Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals:Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	ES2							
				AA	BA	CA	DA	FA	GA	HA	JA
Repetitive Peak Reverse Voltage	V _{RRM}	V		50	100	150	200	300	400	500	600
Average Forward Current	I _{F(AV)}	A	60Hz Half-sine wave, Resistance load, TL=110°C	2.0							
Surge(Nonrepetitive)Forward Current	I _{FSM}	A	60HZ Half-sine wave, 1 cycle, Ta=25°C	50							
Storage Temperature	T _{stg}	°C		-55 ~ +150							
Junction Temperature	T _j	°C		-55 ~ +150							

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	ES2							
				AA	BA	CA	DA	FA	GA	HA	JA
Peak Forward Voltage	V _{FM}	V	I _F =2.0A	0.95			1.3		1.7		
Peak Reverse Current	I _{RRM1}	µA	V _{RM} =V _{RRM}	5.0							
	I _{RRM2}			350							
Maximum reverse recovery time	T _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A	35							
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	Between junction and ambient	75 ¹⁾							
	R _{θJ-L}		Between junction and terminal	20 ¹⁾							

Notes:

¹⁾ Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



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■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

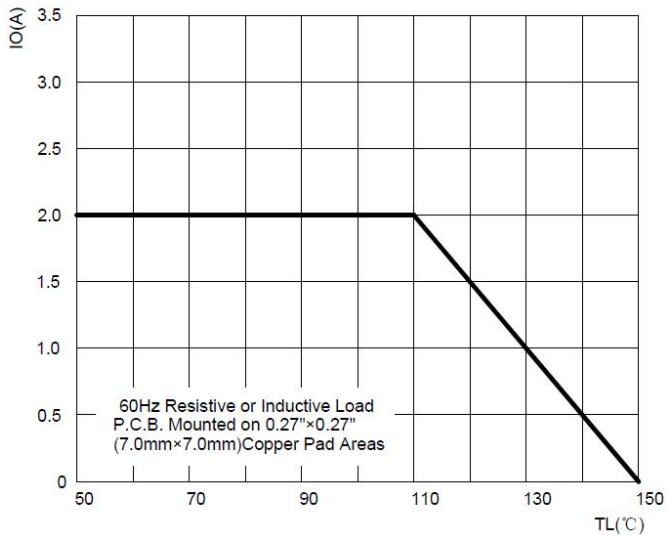


FIG2: Maximum Non-Repetitive Forward Surge Current

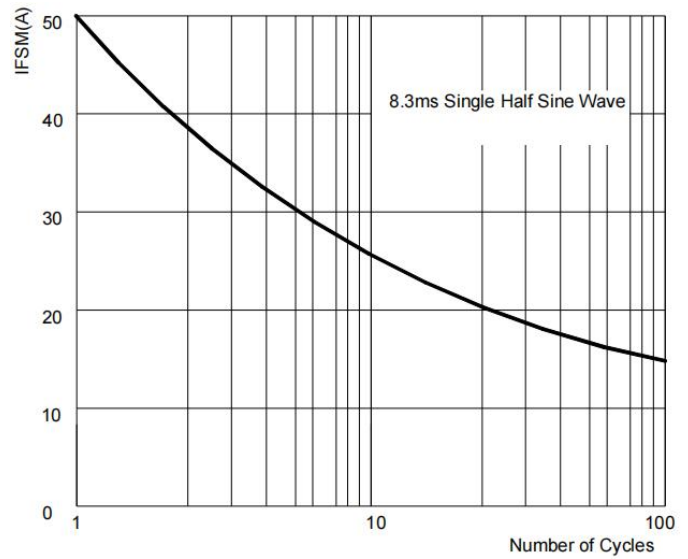


FIG3: Typical Forward Characteristics

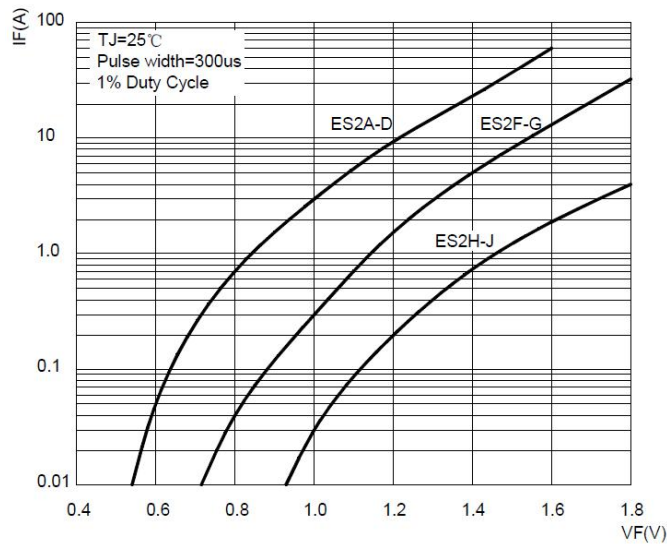


FIG4: Typical Reverse Characteristics

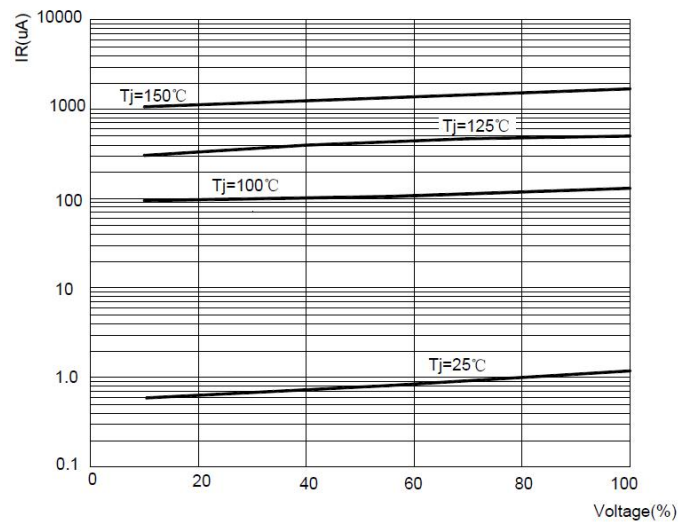
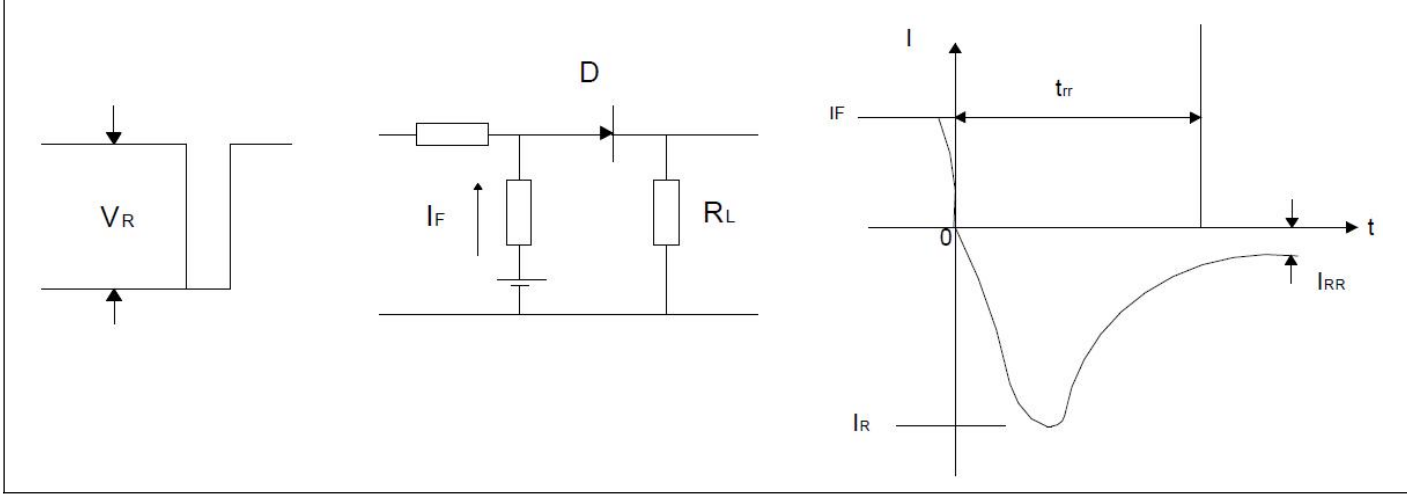


FIG5: Diagram of circuit and Testing wave form of reverse recovery time



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■ Ordering Information (Example)

PREFERRED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ES2AA~ES2JA	DO-214AC(SMA)	5000	10000	80000	13" reel
ES2AA~ES2JA	DO-214AC(SMA)	7500	15000	120000	13" reel

■ Outline Dimensions

