



ES2AAQ THRU ES2JAQ

Surface Mount Super Fast Recovery Rectifier

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- In compliance with AEC-Q101 qualified. with suffix “Q”

Typical Applications

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

Mechanical Data

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

■Maximum Ratings (T_a=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES2AAQ	ES2BAQ	ES2CAQ	ES2DAQ	ES2FAQ	ES2GAQ	ES2HAQ	ES2JAQ
Device marking code			ES2AA	ES2BA	ES2CA	ES2DA	ES2FA	ES2GA	ES2HA	ES2JA

@60Hz sine wave, Resistance load, T_a

Forward current I _O (Fig.1)	I _O	A	2.0							
Surge(non-repetitive)forward current @60Hz Half-sine wave,1 cycle, T _a =25	I _{FSM}	A	50							
Storage temperature	T _{stg}		-55~+175							
Junction temperature	T _J		-55~+175							

■Electrical Characteristics T_a=25 °C Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ES2AAQ	ES2BAQ	ES2CAQ	ES2DAQ	ES2FAQ	ES2GAQ	ES2HAQ	ES2JAQ
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	0.95				1.3		1.7	
Maximum reverse recovery time	T _{RR}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	35							
Typical junction capacitance	C _J	pF	V _R =4V, f=1MHz	30				25		20	

Maximum DC reverse current at rated DC blocking voltage per diode@ V_{RM}=V_{RRM}

T _a =25	5
T _a =125	100



ES2AAQ THRU ES2JAQ

■ Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	ES2AAQ	ES2BAQ	ES2CAQ	ES2DAQ	ES2FAQ	ES2GAQ	ES2HAQ	ES2JAQ
Thermal Resistance	$R_{\theta J-A}$	/W	85 ⁽¹⁾							
	$R_{\theta J-L}$	/W	20 ⁽¹⁾							

Note

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics (Typical)

Fig.1: I_O - T_L Curve

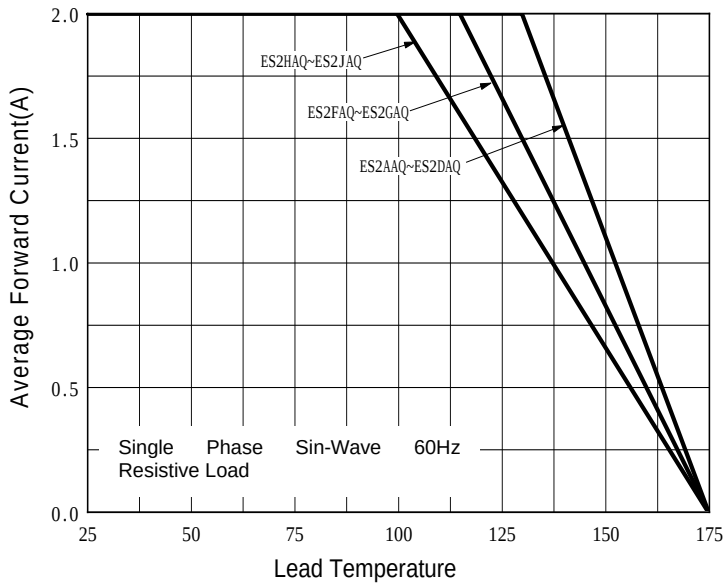


Fig.2: Surge Forward Current Capability

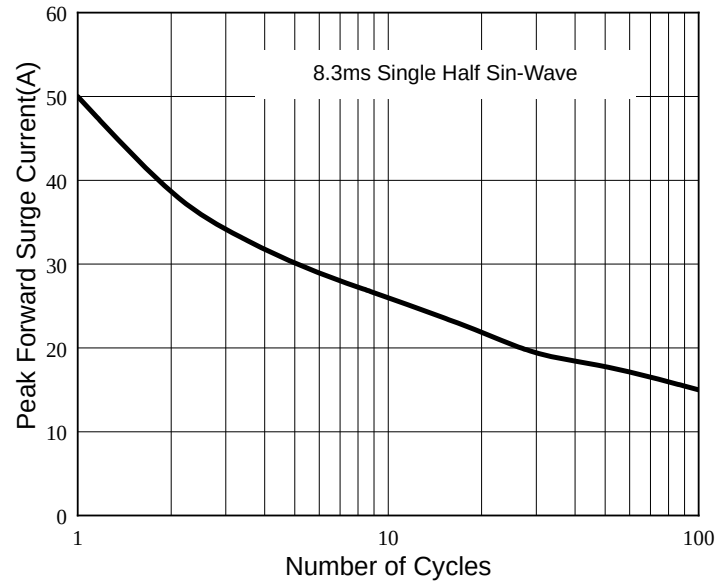


Fig.3: Typical Forward Characteristics

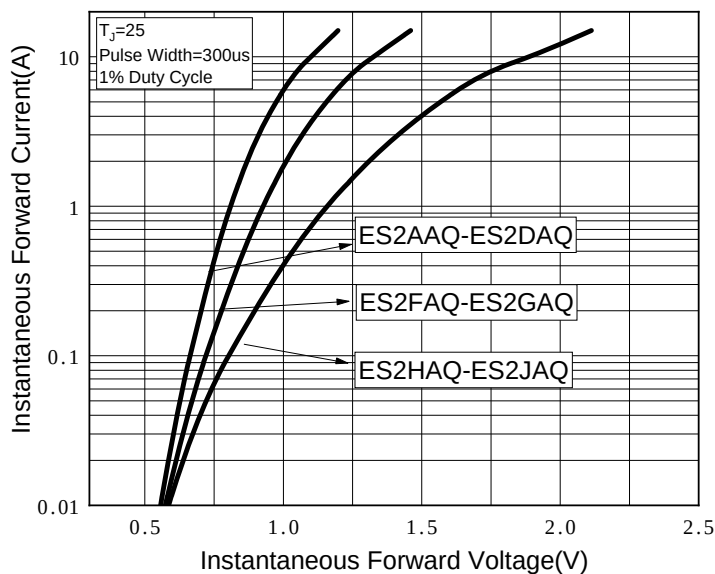
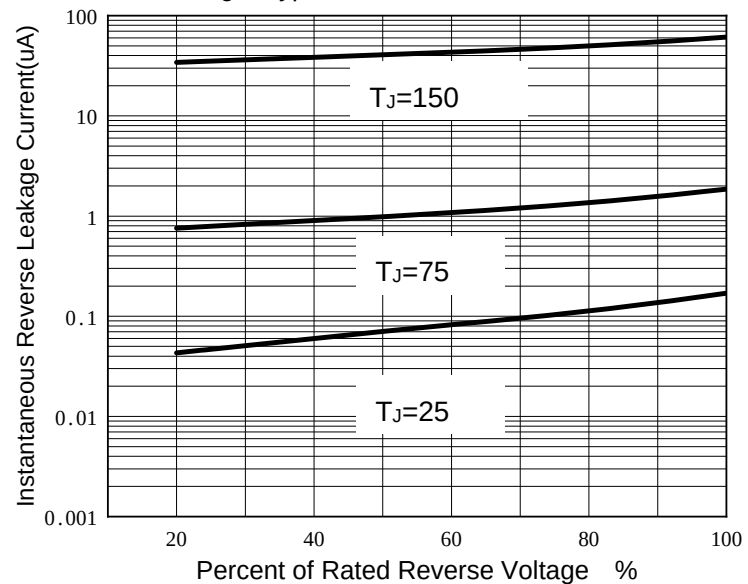


Fig.4: Typical Reverse Characteristics





ES2AAQ THRU ES2JAQ

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, lifesaving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.