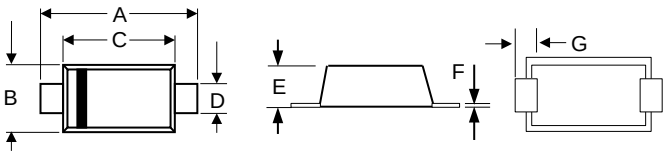
ES2AAF THRU ES2JAF

2.0 Amp. Surface Mount Glass Passivated Super Fast Rectifiers

Features

* For surface mounted application
* Low Profile Package
* Glass Passivated Chip Junction
* High Temp Soldering: 260℃ for 10seconds at Terminals
* Superfast Recovery Times



RoHS COMPLIANT

SMAF				
DIM.	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.173	0.193	4.40	4.90
B	0.094	0.106	2.40	2.70
C	0.130	0.146	3.30	3.70
D	0.051	0.063	1.30	1.60
E	0.035	0.043	0.90	1.10
F	0.005	0.008	0.12	0.20
G	0.031	0.047	0.80	1.20

Mechanical Data

* Case: SMAF Molded plastic
* Terminals: Solderable per MIL-STD-750, Method 2026
* Polarity: Indicated by cathode band

Maximum Ratings and Electrical Characteristics (TA=25℃ unless otherwise noted)

Type Number	Symbols	ES2AAF	ES2BAF	ES2CAF	ES2DAF	ES2GAF	ES2JAF	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	280	420	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	150	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2						A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	50						A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.0				1.25	1.7	V
Maximum D.C Reverse Current @ T_J=25℃ at Rated D.C Blocking Voltage @ T_J=125℃	I_R	5 100						μA
Maximum Reverse Recovery Time (Note1)	Trr	35						nS
Typical Junction Capacitance(Note2)	C_J	30						pF
Typical thermal resistance (Note3)	$R_{\theta JA}$ $R_{\theta JC}$	65 20						℃/W
Operating and Storage Temperature Range	T_J / T_{STG}	-55 to +150						℃

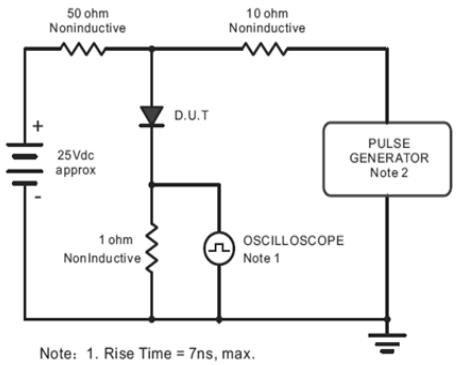
Note 1: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

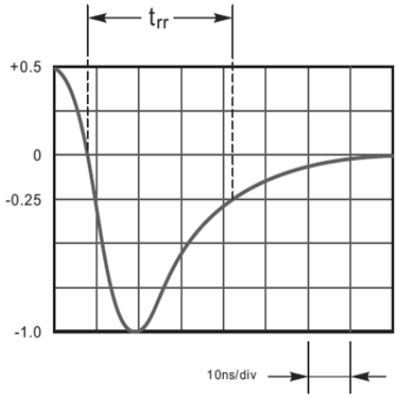
Note 3: P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Ratings and Characteristic Curves

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

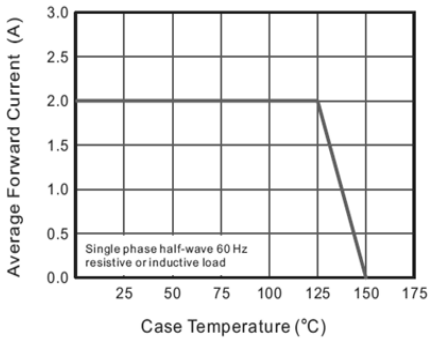


Fig.3 Typical Reverse Characteristics

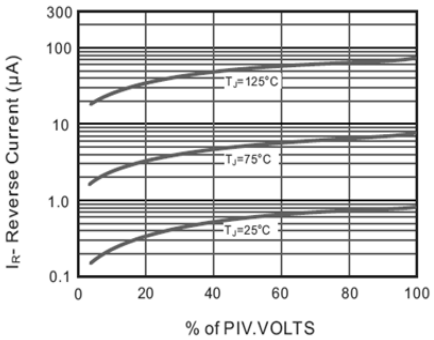


Fig.4 Typical Forward Characteristics

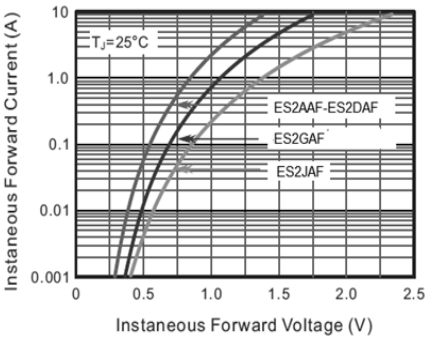


Fig.5 Typical Junction Capacitance

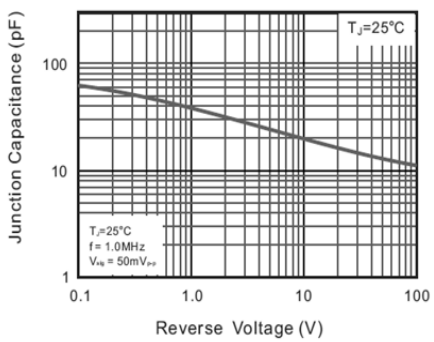
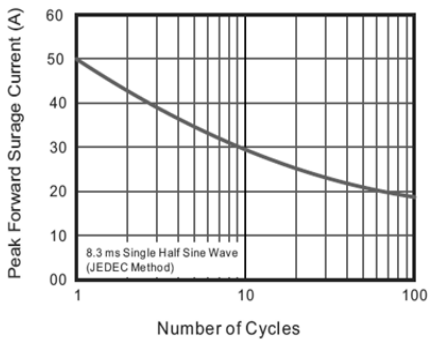


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current



Ordering Information

Part No.	Package	Packing Code	Packing
ES2AAF THRU ES2JAF	SMAF	R30	3000pcs/Reel

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