



ES2AAH THRU ES2JAH

SURFACE MOUNT SUPERFAST RECOVERY RECTIFIER

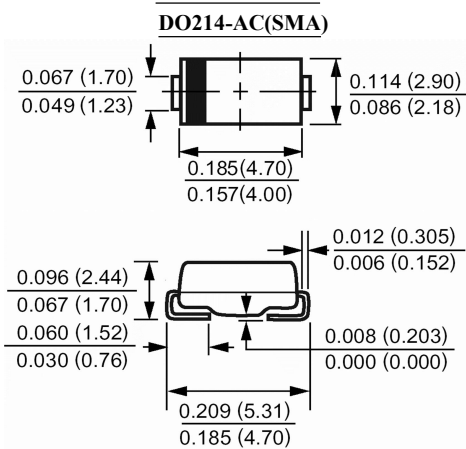
REVERSE VOLTAGE: 50 to 600 VOLTS
FORWARD CURRENT: 2.0 AMPERE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass Passivated Die Construction
- For surface mounted applications
- Superfast recovery times for high efficiency
- Suffix "H" indicates Halogen-free parts, ex. ES2AAH

MECHANICAL DATA

Case : Molded plastic, DO-214AC(SMA)
 Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
 Polarity : Color band denotes cathode end



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Parameter	Symbols	ES2AAH	ES2BAH	ES2CAH	ES2DAH	ES2EAH	ES2GAH	ES2JAH	Units	
		ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J		
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420		
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600		
Maximum Average Forward Rectified Current	$I_{(AV)}$	2.0							Amp	
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amp	
Maximum Forward Voltage at 2.0A	V_F	0.95				1.30		1.70	Volts	
Maximum Reverse Current at $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	I_R	5.0				350			μAmp	
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	20								$^\circ\text{C/W}$
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35							ns	
Operating Junction Temperature Range	T_J	-65 to +150							$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-65 to +150								

NOTES:

1. Thermal resistance from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas
2. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$.



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RATINGS AND CHARACTERISTIC CURVES

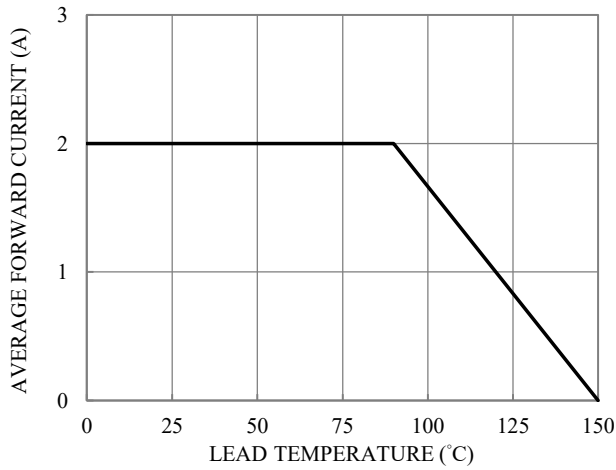


Fig.1-FORWARD CURRENT DERATING CURVE

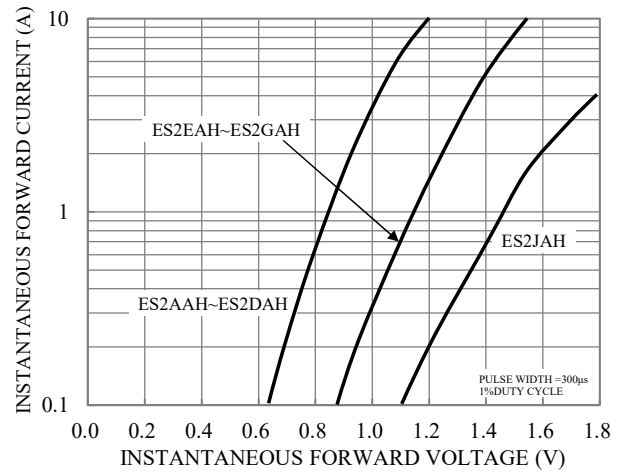


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

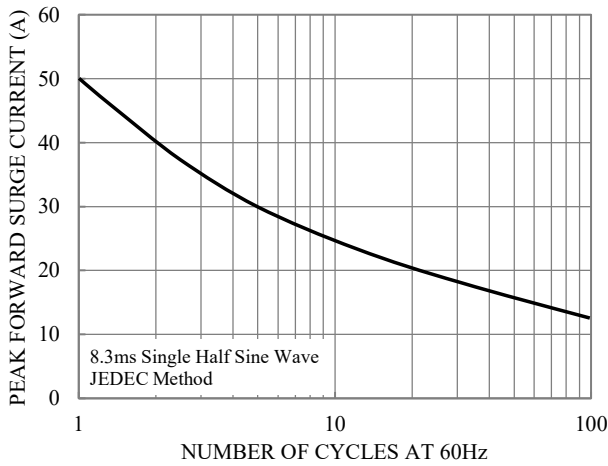


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

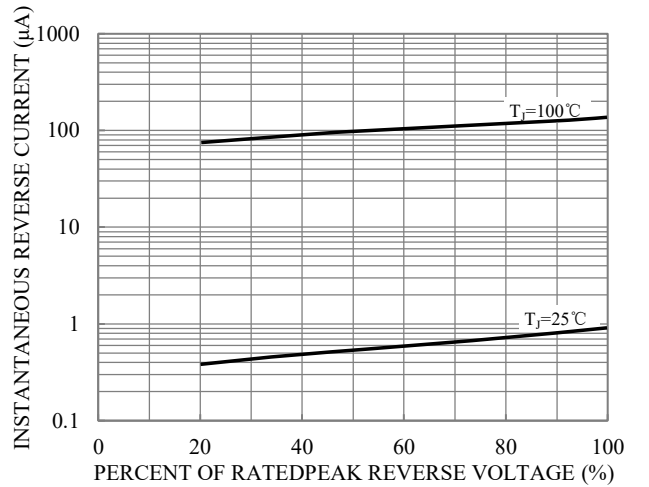


Fig.4-TYPICAL REVERSE CHARACTERISTICS