



ES2AH THRU ES2JH

SURFACE MOUNT SUPERFAST RECOVERY RECTIFIER

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

FEATURES

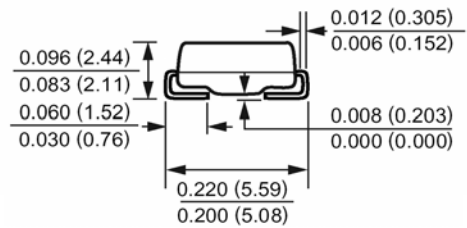
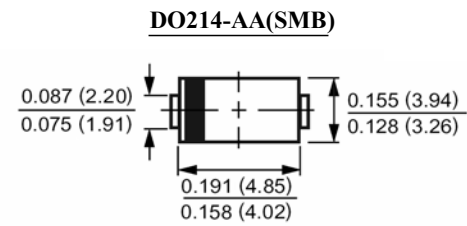
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass Passivated Die Construction
- For surface mounted applications
- Superfast recovery times for high efficiency
- Suffix "H" indicates Halogen-free parts, ex. ES2AH

MECHANICAL DATA

Case : Molded plastic, DO-214AA(SMB)

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	ES2AH	ES2BH	ES2CH	ES2DH	ES2EH	ES2GH	ES2JH	Units
		ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J	
Marking Code									
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 $T_J=25^\circ C$ at Rated DC Blocking Voltage $T_J=125^\circ C$	I_R				5.0				μAmp
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$				20				$^\circ C/W$
Maximum Reverse Recovery Time (Note 2)	t_{rr}				35				ns
Operating Junction Temperature Range	T_J				-65 to +150				$^\circ C$
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 : $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$.



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RATINGS AND CHARACTERISTIC CURVES

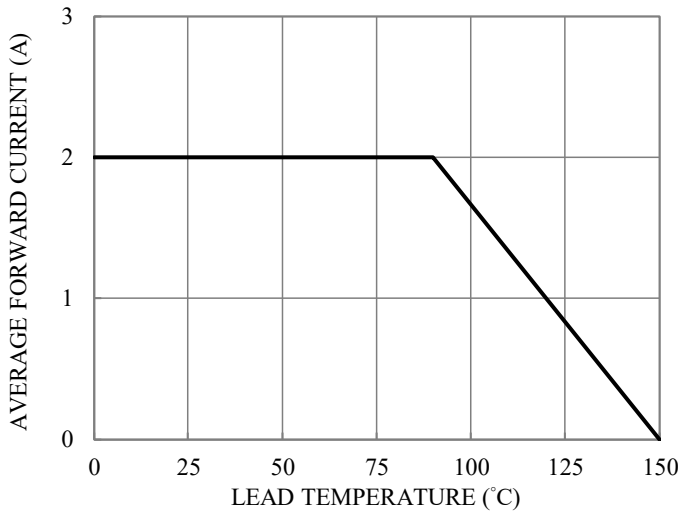


Fig.1-FORWARD CURRENT DERATING CURVE

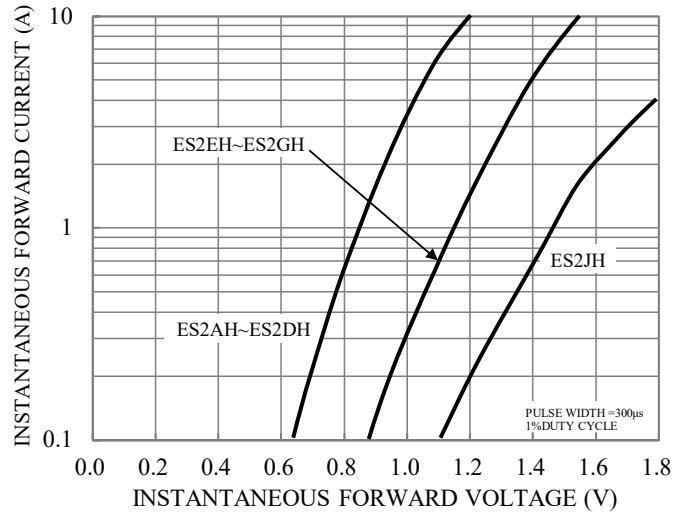


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

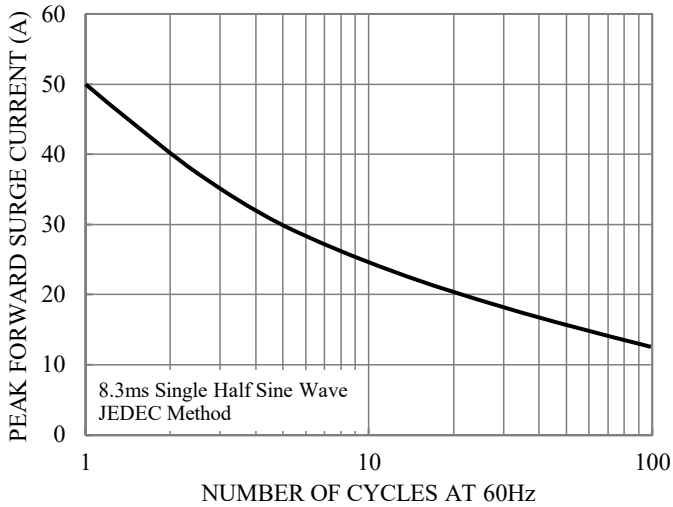


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

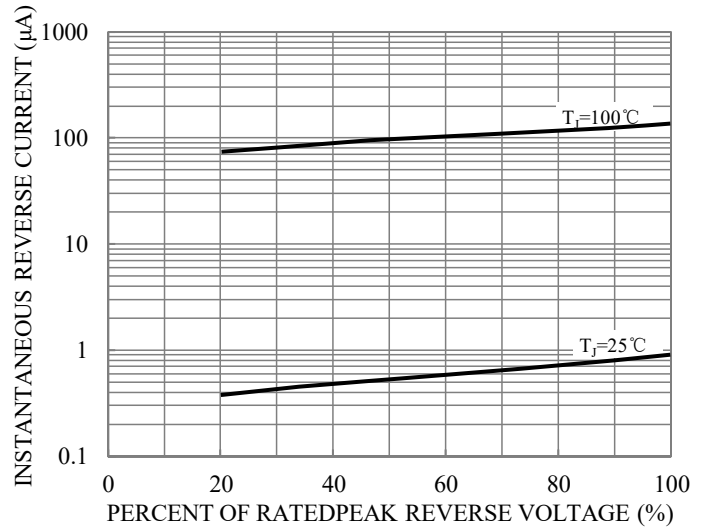


Fig.4-TYPICAL REVERSE CHARACTERISTICS