

Pb Free Plating Product

ES1A thru ES1J



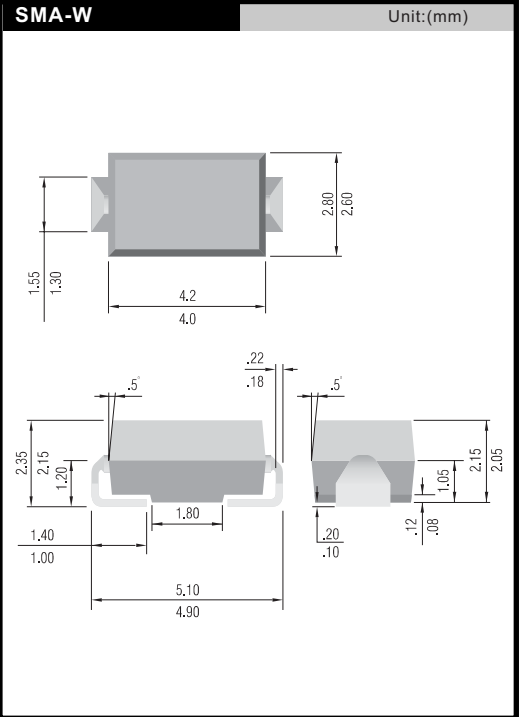
1.0 AMPERE SURFACE MOUNT SUPER FAST RECTIFIERS

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Easy pick and place
- For surface mounted application
- Low profile package
- Built-in strain relief
- Superfast recovery times for high efficiency
- High temperature soldering : 250°C/10 seconds at terminals.

Mechanical Data

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



Absolute Maximum Ratings and 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%.

	Symbols	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current $T_L = 75^\circ C$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum forward voltage at 1.0A	V_F	0.95			1.25		1.70		V
Maximum reverse current at $T_A = 25^\circ C$ at rated DC blocking voltage at $T_A = 100^\circ C$	I_R	5.0							uA
	I_R	100							
Typical Junction Capacitance at $V_R = 4.0 V, f = 1 MHz$	C_J	10							pF
Typical Reverse Recovery Time at $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$	t_{rr}	35							ns
Typical thermal resistance (Note 1)	$R_{\theta JL}$	35							°C/W
Operating junction and storage temperature range	T_J, T_S	-55 to +150							°C

Notes:1. Thermal resistance from junction to lead mounted on P.C.B. with 0.3 X 0.3" (8.0 X 8.0 mm) copper pad areas.

