

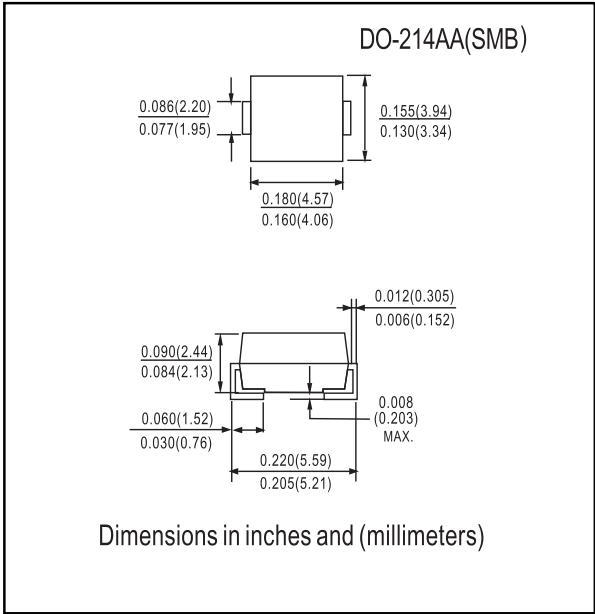


FEATURES

- For surface mount applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS Environment substance directive request

MECHANICAL DATA

Case : JEDEC DO-214AA molded plastic
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity : Indicated by cathode band
 Standard packaging : 16mm tape (EIA-481)
 Weight : 0.003 ounce, 0.093grams



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%

	SYMBOL	ES1AB	ES1BB	ES1CB	ES1DB	ES1EB	ES1GB	ES1JB	UNITS	
Maximum Repetitive 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	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	Volts	
Maximum Average Forward Rectified Current @ T _L = 100°C	I <sub(av)< sub=""></sub(av)<>	1.0							Amps	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30							Amps	
Maximum Instantaneous Forward Voltage at 1.0A	V _F	0.95			1.25		1.7		Volts	
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	5.0				100				μ A
Maximum Reverse Recovery Time (NOTE 1)	T _{RR}	35								nS
Typical Junction Capacitance (NOTE 2)	C _J	10								pF
Typical Thermal Resistance (NOTE 3)	R _{θ JA}	34								°C / W
Operating and Storage Temperature Range	T _J T _{STG}	-55 to +150							°C	

NOTES :
 1. Rverse Recovery Test Condibons I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
 2. Measured at 1 MHz and applied reverse Voltag of 4.0VDC
 3. 8.0mm² (.013mm thick) land areas



RATINGS AND CHARACTERISTIC CURVES ES1AB THRU ES1JB

Fig. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM ES1A THRU ES1G

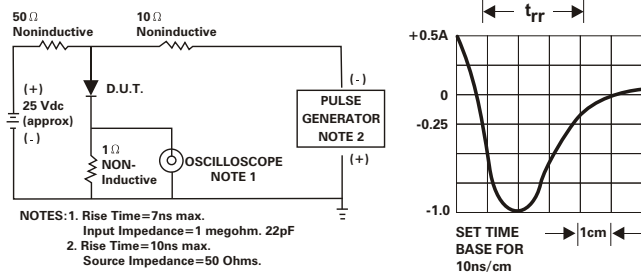


Fig. 2 - MAXIMUM AVERAGE FORWARD CURRENT RATING

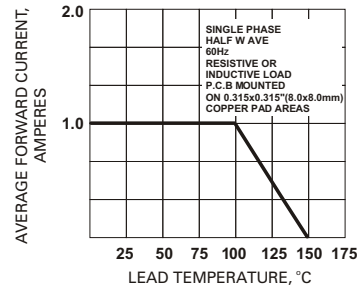


Fig. 3 - TYPICAL REVERSE CHARACTERISTICS

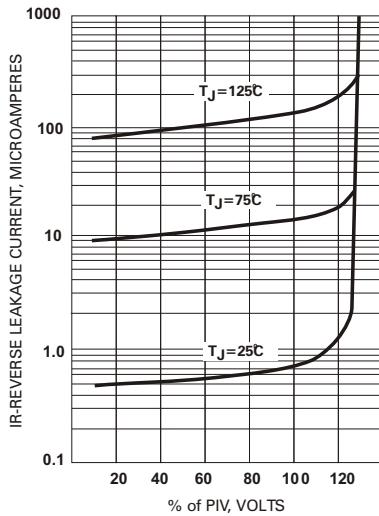


Fig. 4 - TYPICAL FORWARD CHARACTERISTICS

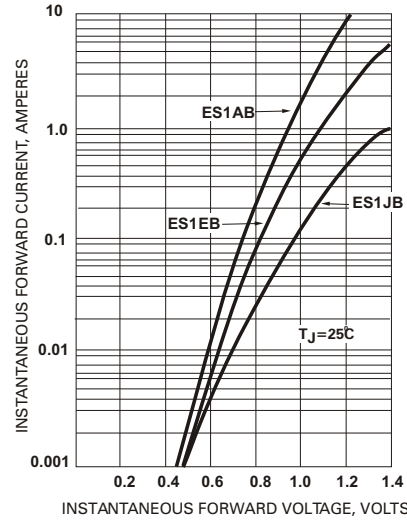


Fig. 5 - MAXIMUM NON-REPETITIVE SURGE CURRENT

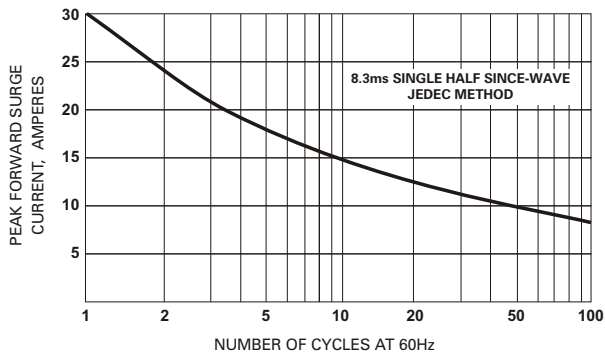


Fig. 6 - TYPICAL JUNCTION CAPACITANCE

