

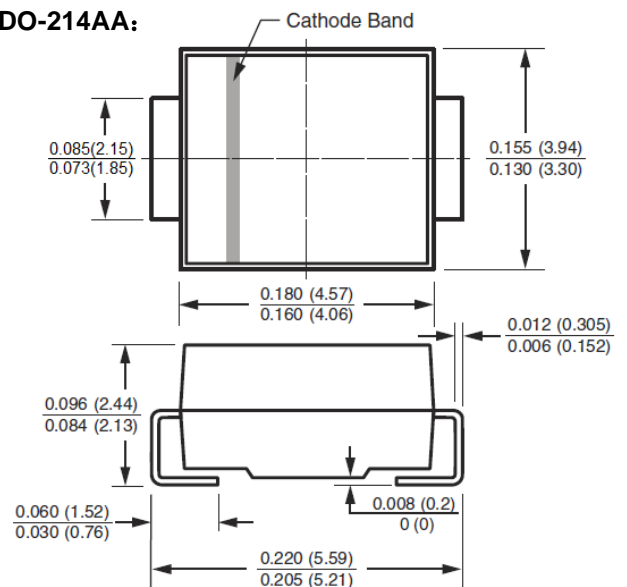
Features

- * Glass passivated junction chip
- * For surface mounted application
- * Low profile package
- * Built-in strain relief
- * Ideal for automated placement
- * Easy pick and place
- * Superfast recovery time for high efficiency
- * High temperature soldering:
260°C/10 seconds at terminals
- * Plastic material used carries Underwriters
Laboratory Classification 94V-0



Package Outline Dimensions in inches (millimeters)

SMB/DO-214AA:



Mechanical Data

- * Case: Molded plastic
- * Terminals: Solder plated
- * Polarity: Indicated by cathode band
- * Standard packaging:
12mm tape(ELA STD RS-481)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	ES2A	ES2B	ES2C	ES2D	ES2G	ES2J	Unit
Maximum Recurrent 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	$I_{F(AV)}$	2.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	50						A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	0.95				1.30	1.7	V
Maximum D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	10 350						μA
Maximum Reverse Recovery Time(Note1)	T_{rr}	35						nS
Typical Junction Capacitance(Note2)	C_J	25				20		pF
Maximum Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	75 20						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150						$^\circ\text{C}$

NOTE: 1、 Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$. 2、 Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3、 Units Mounted on P.C.B. 0.4" x 0.4" (10mm x 10mm) Pad Areas

Ratings and Characteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

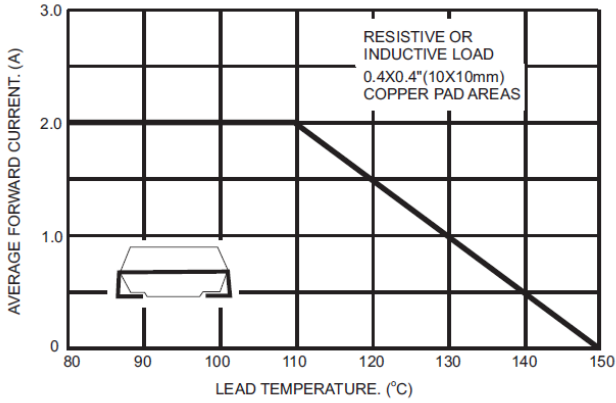


FIG.2- TYPICAL REVERSE CHARACTERISTICS

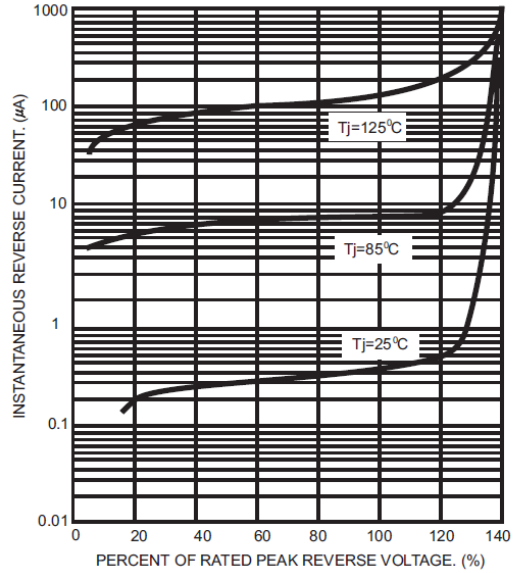


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

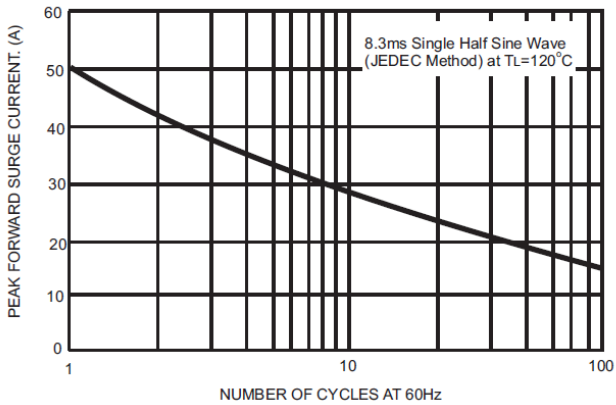


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

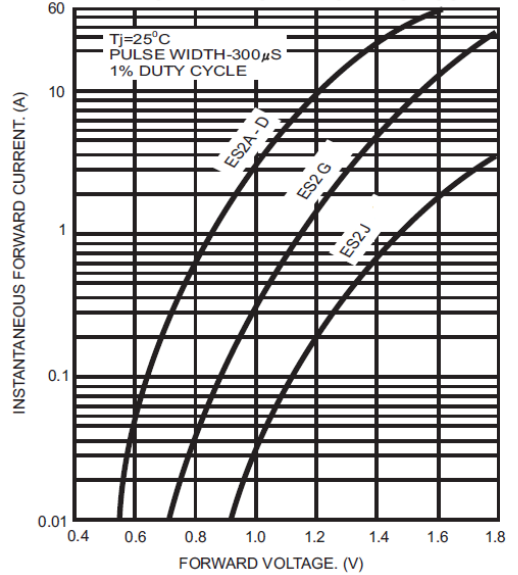


FIG.4- TYPICAL JUNCTION CAPACITANCE

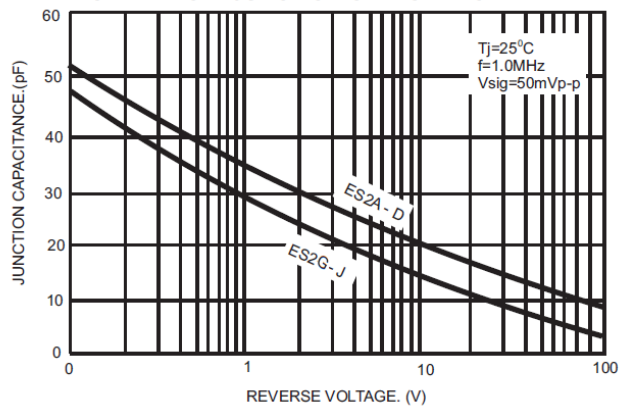
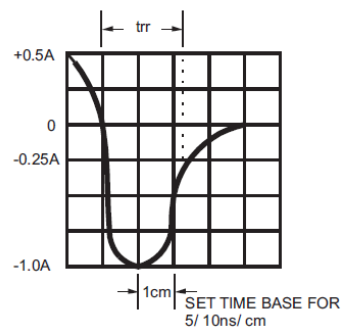
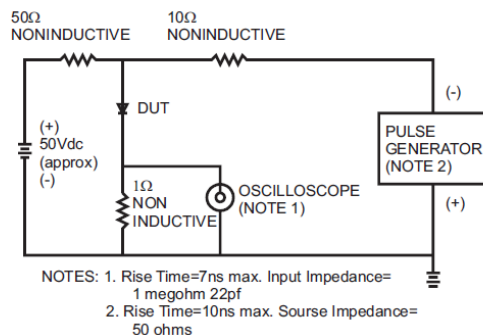


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





ES2A THRU ES2J
2.0 Amps. Surface Mount Super Fast Rectifiers

Ordering Information

Part No.	Package	Packing
ES2A~ES2J	SMB	3K/Reel