

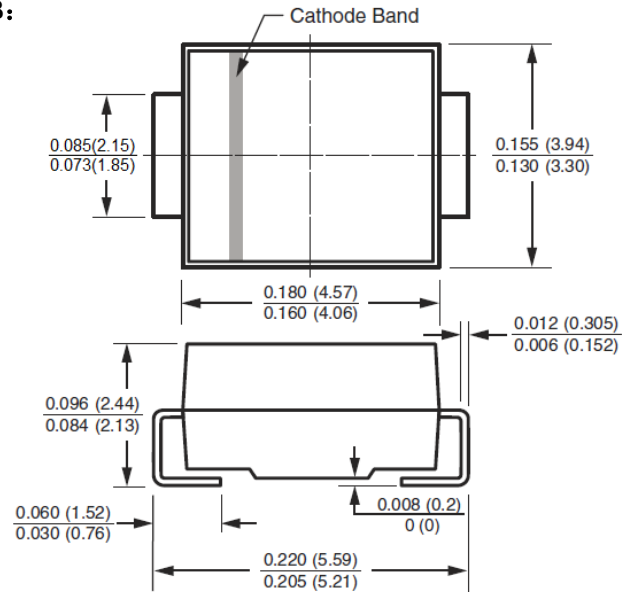
Features

- * For surface mounted application
- * Extremely Low Thermal Resistance
- * Easy Pick and Place
- * High Temp Soldering: 260°C For 10seconds at Terminals
- * Superfast Recovery Times For High Efficiency



Package Outline Dimensions in inches (millimeters)

SMB:



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	ES3AB	ES3BB	ES3CB	ES3DB	ES3GB	ES3JB	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 $T_J=75^\circ\text{C}$	$I_{F(AV)}$	3.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	100						A
Maximum Instantaneous Forward Voltage at 3.0A(Note1)	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	10 500						μA
Maximum Reverse Recovery Time(Note2)	T_{rr}	35						nS
Typical Junction Capacitance(Note3)	C_J	45				30		pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	47 12						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150						$^\circ\text{C}$

NOTE: 1、 Pulse test: $t_p=300\mu\text{s}$, 1% duty cycle 2、 Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

3、 Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

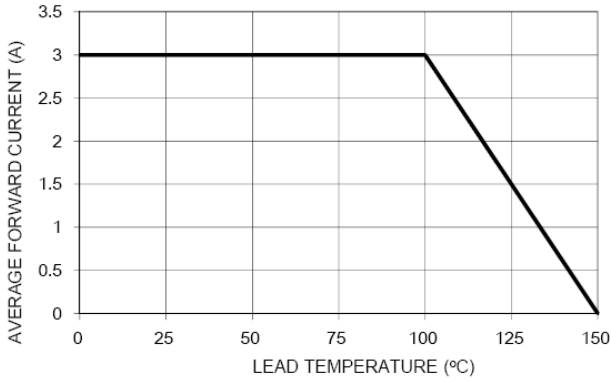


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

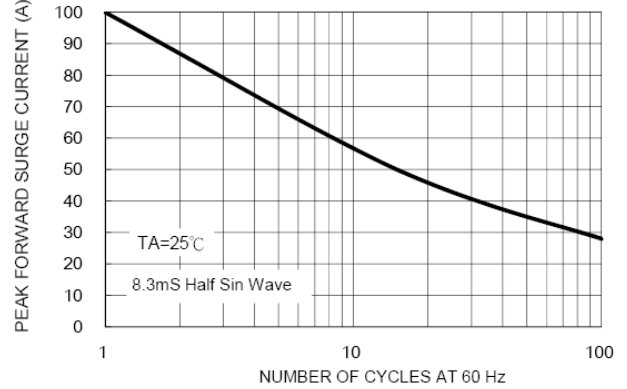


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

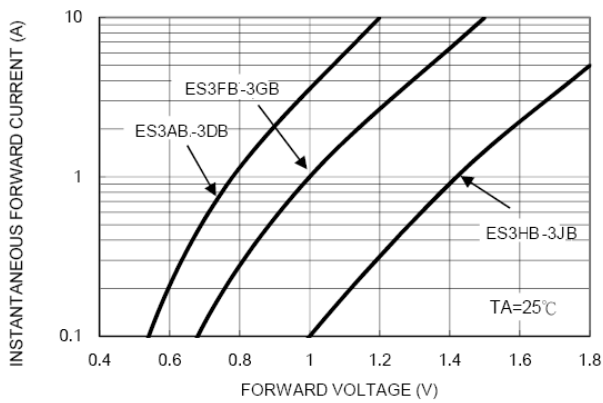


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

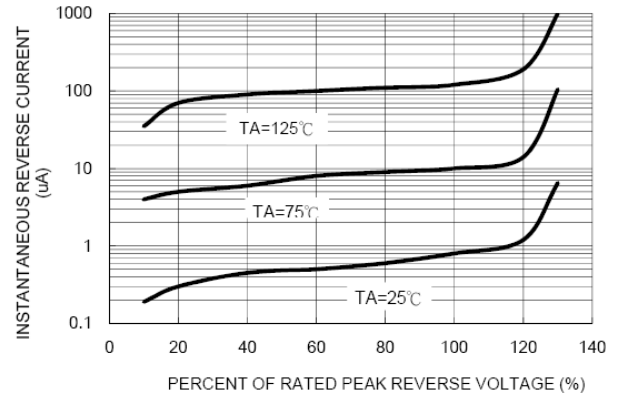


FIG. 5 TYPICAL JUNCTION CAPACITANCE

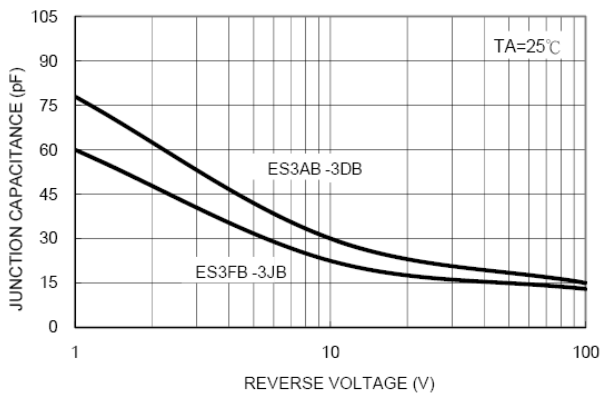


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

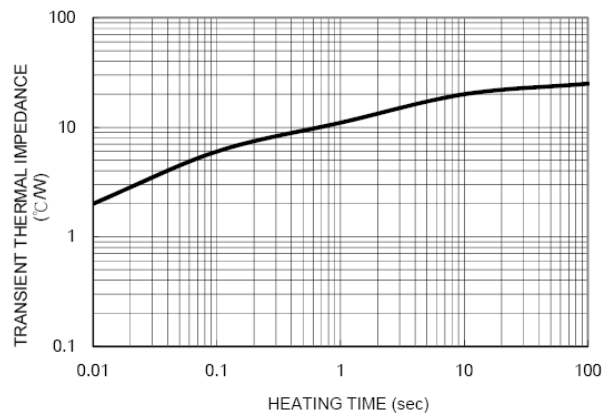
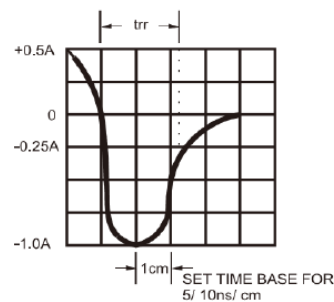
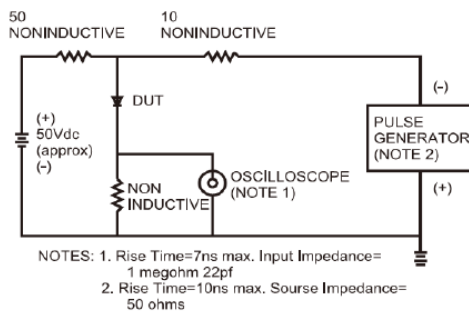


FIG.7- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





ES3AB THRU ES3JB

3.0 Amps. Surface Mount Glass Passivated Super Fast Rectifiers

Ordering Information

Part No.	Package	Packing
ES3AB~ES3JB	SMB	3K/Reel