

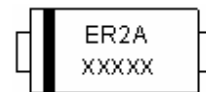
ER2A-ER2J SURFACE MOUNT SUPER FAST RECTIFIER

Features:

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Overload Drop, High Efficiency
- Surge Overload Rating to 30A Peak
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

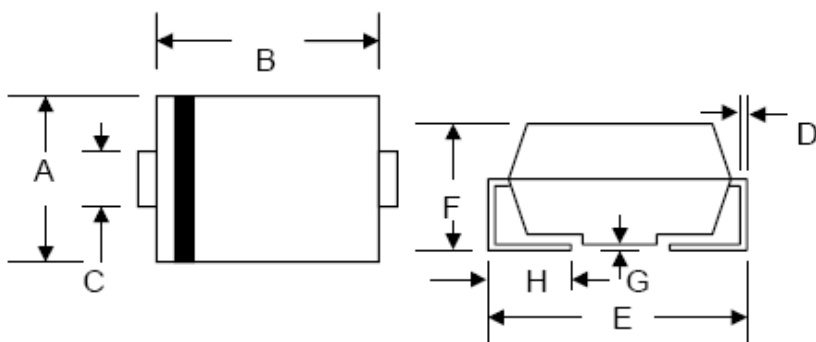
Mechanical Data:

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.68 grams(approx)



ER2A

Mechanical Dimensions: In mm / Inches



Dim.	SMB/DO-214AA			
	Min.	Max.	Min.	Max.
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.80	2.20	0.071	0.087
D	0.152	0.305	0.006	0.012
E	4.80	5.59	0.189	0.220
F	2.10	2.60	0.083	0.102
G	0.051	0.203	0.002	0.008
H	0.76	1.52	0.030	0.060
	In mm		In inch	

SMB

MARKING, MOLDING RESIN

Marking for ER2A/B/C/D/E/G/J, 1st row ER2A/B/C/D/E/G/J, 2nd row YYWWL

Where YY is the manufacture year

WW is the manufacture week code

L is the wafer's Lot Number



Ordering Information:

Device	Package	Shipping
ER2A-ER2J	SMB (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	150	200	300	400	600	V
RMS Reverse Voltage	VR(RMS)	35	70	105	140	210	280	420	V
Average Rectified Output Current @TL = 110°C	Io	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Forward Voltage @IF = 2.0A	VFM	0.95				1.25		1.7	V
Peak Reverse Current @TA = 25°C At Rated DC Blocking Voltage @TA = 125°C	IRM	5.0 100							µA
Reverse Recovery Time (Note 1)	trr	35							nS
Typical Junction Capacitance (Note 2)	Cj	25							pF
Typical Thermal Resistance (Note 3)	RθJL	20							K/W
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150							°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

Technical Data
Data Sheet N0132, Rev. D

Green Products

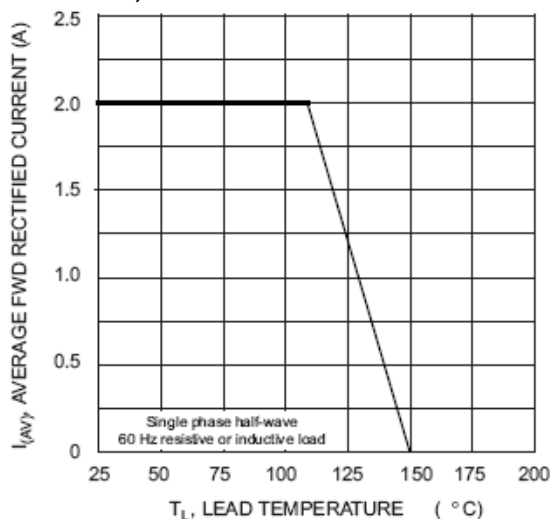


Fig. 1 Forward Current Derating Curve

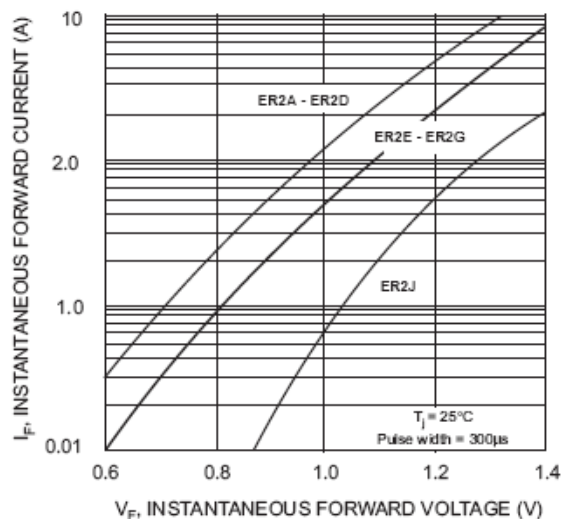


Fig. 2 Typical Forward Characteristics

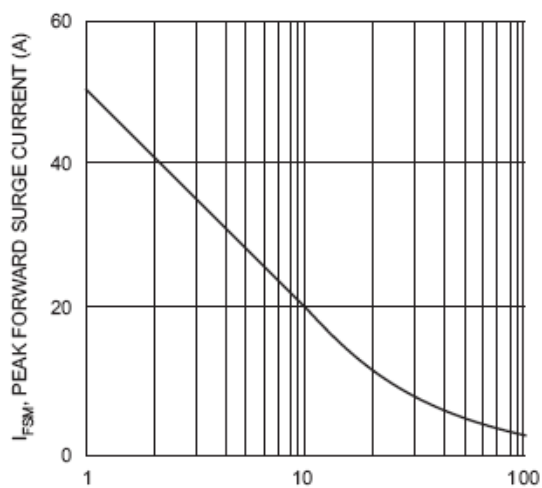


Fig. 3 Peak Forward Surge Current

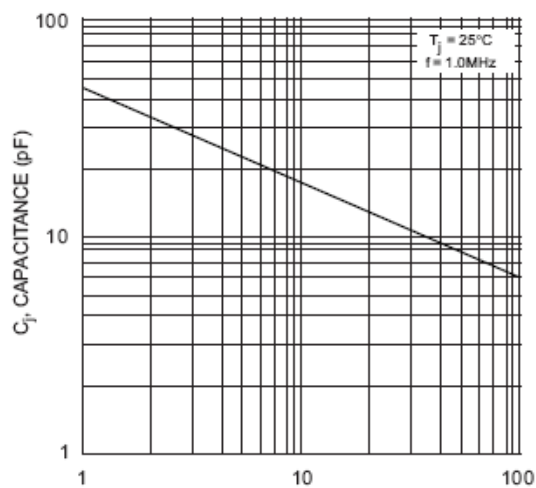
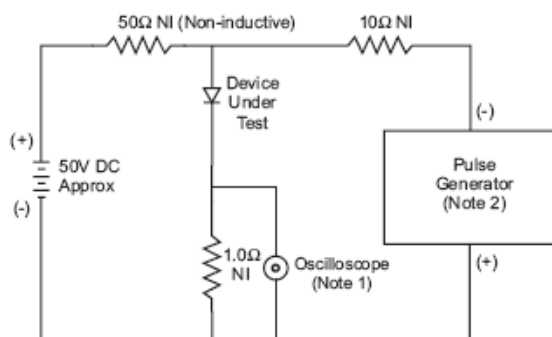


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0M Ω , 22pF.
2. Rise Time = 10ns max. Input Impedance = 50 Ω .

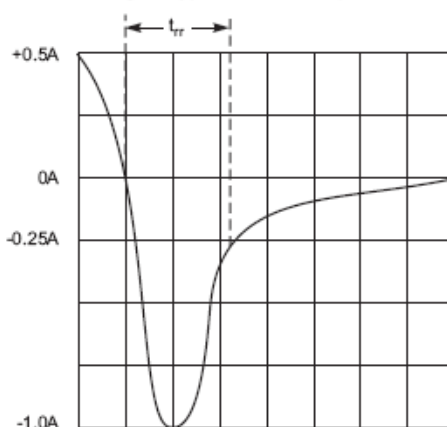


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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