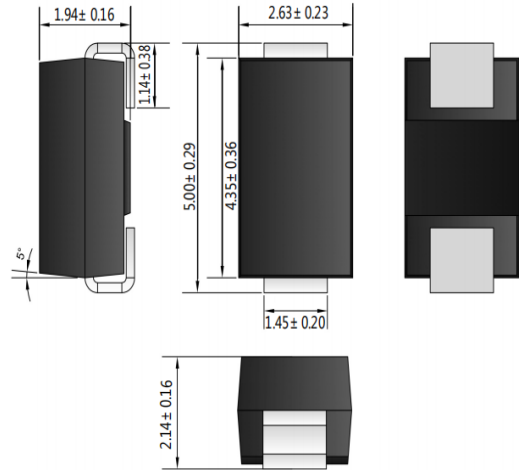## Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 50A Peak
- Low Power Loss
- Super-Fast Recovery Time
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

SMA /DO-214AC

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

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ER2AA	ER2BA	ER2CA	ER2DA	ER2EA	ER2GA	ER2JA	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	150	200	300	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	V
Average Rectified Output Current @T_L = 110°C	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage @I_F = 2.0A	V_{FM}	0.95				1.25		1.7	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 350							μA
Reverse Recovery Time (Note 1)	t_{rr}	35							nS
Typical Junction Capacitance (Note 2)	C_J	25							pF
Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Lead (Note 3)	R $_{JA}$ R $_{JL}$	75 25							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 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.
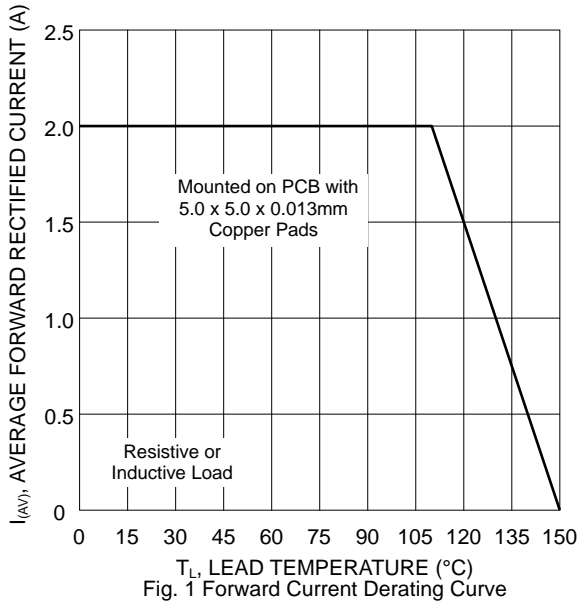 3. Mounted on PCB with 5.0mm x 5.0mm x 0.013mm thick copper pads.

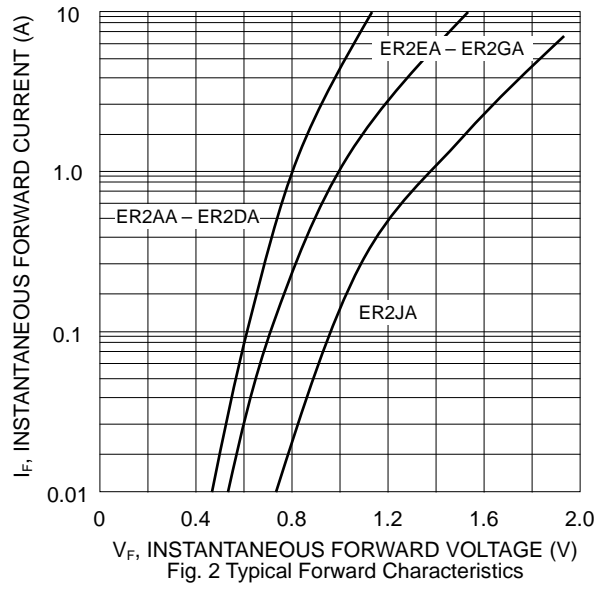Fig. 1 Forward Current Derating Curve
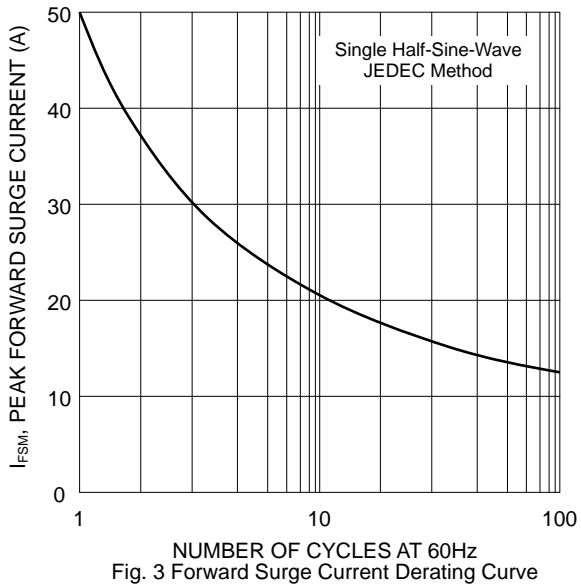

Fig. 2 Typical Forward Characteristics
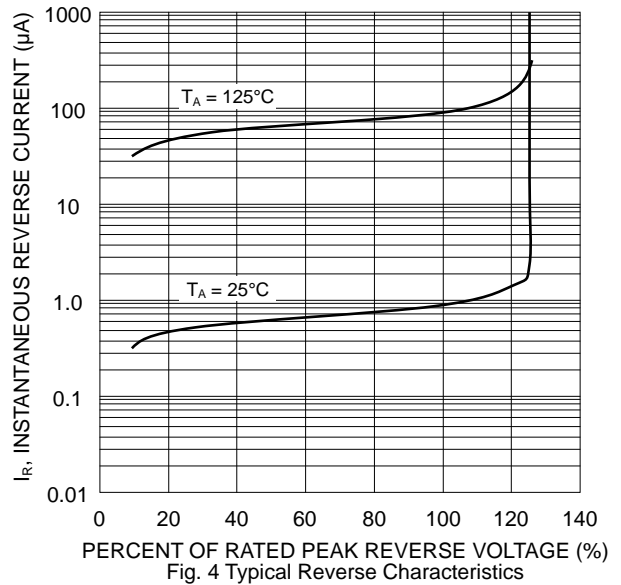

Fig. 3 Forward Surge Current Derating Curve
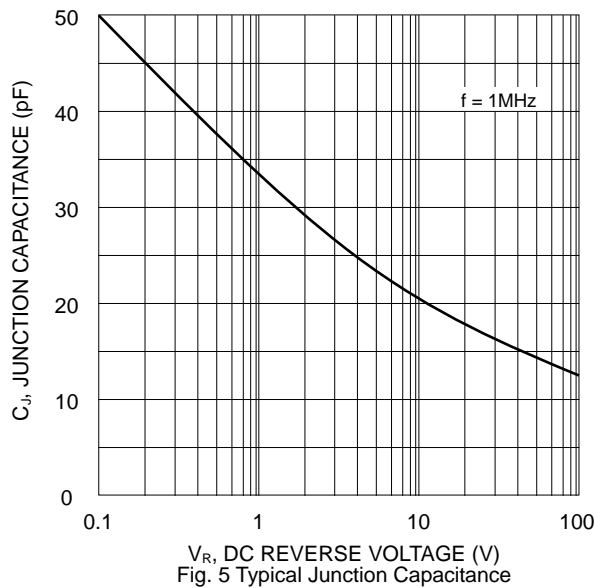

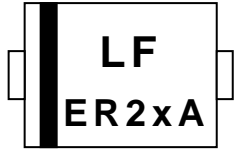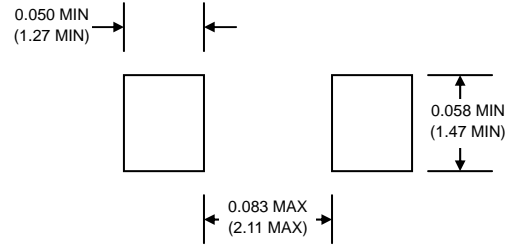Fig. 4 Typical Reverse Characteristics

Fig. 5 Typical Junction Capacitance

MARKING INFORMATION

LF

ER2xA

Cathode = Polarity Band
ER2xA = Device Number
x = A, B, C, D, E, G or J

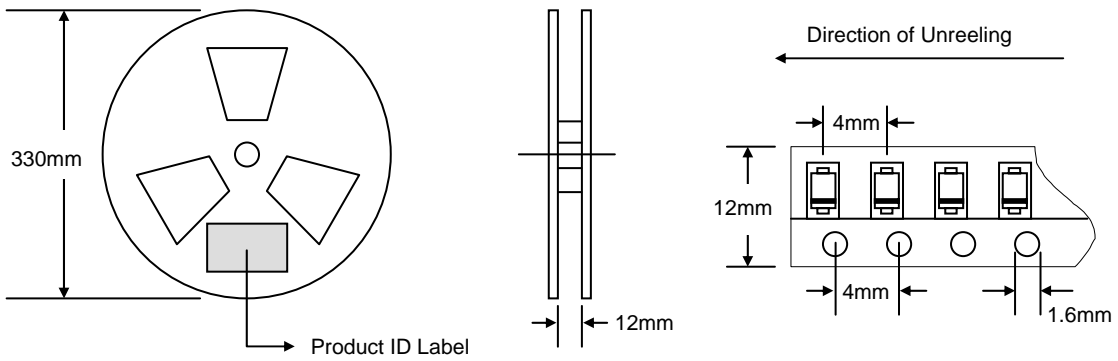## RECOMMENDED FOOTPRINT

0.050 MIN
(1.27 MIN)

0.058 MIN
(1.47 MIN)

0.083 MAX
(2.11 MAX)

inches(mm)

PACKAGING INFORMATION

TAPE & REEL

330mm

Product ID Label

12mm

Direction of Unreeling

4mm

12mm

4mm

1.6mm

Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	5,000	340 x 337 x 45	10,000	370 x 370 x 420	80,000	14.0