

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Glass Passivated Die Construction
- Halogen Free. "Green" Device (Note 2)
- AEC-Q101 Qualified

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note 3): 20°C/W Junction to Lead
- Thermal Resistance(Note 3): 75°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER2DHE3-L	ER2D	200V	140V	200V
ER2GHE3-L	ER2G	400V	280V	400V
ER2JHE3-L	ER2J	600V	420V	600V

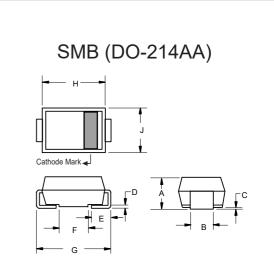
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>L</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage			
ER2DHE3-L ER2GHE3-L ER2JHE3-L	V <sub>F</sub>	0.95V 1.30V 1.70V	I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 100μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance ER2DHE3-L ER2GHE3-L ER2JHE3-L	CJ	30pF 25pF 20pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

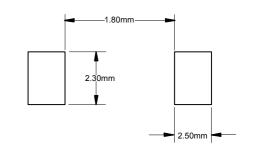
- 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 3. Mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

# 2 Amp Super Fast Recovery Rectifier 200 to 600 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.079	0.103	2.00	2.62	
В	0.075	0.087	1.91	2.21	
С	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
Е	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
Н	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

#### **Suggested Solder Pad Layout**





## **Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

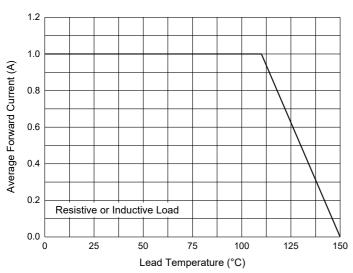


Fig. 3 - Typical Instantaneous Forward Characteristics

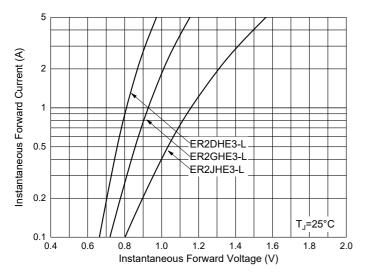


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

60

40

40

40

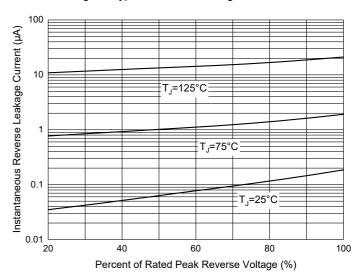
20

10 -8.3 ms Single Half Sine-Wave

Fig. 4 - Typical Reverse Leakage Characteristics

Number of Cycles at 60 Hz

100





## **Ordering Information**

Device	Packing	
ER2DHE3-LTP~ER2JHE3-LTP	Tape&Reel: 3Kpcs/Reel	

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