

## **Features**

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

# **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +175°C
- Storage Temperature Range: -65°C to +175°C
- Maximum Thermal Resistance: 20°C/W Junction to Lead
- Maximum Thermal Resistance: 25°C/W Junction to Case
- Maximum Thermal Resistance: 75°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER2A-L	ER2A	50V	35V	50V
ER2B-L	ER2B	100V	70V	100V
ER2D-L	ER2D	200V	140V	200V
ER2G-L	ER2G	400V	280V	400V
ER2J-L	ER2J	600V	420V	600V

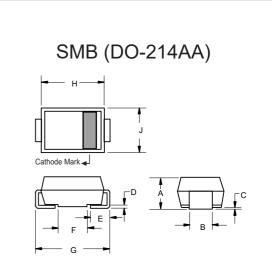
# Electrical Characteristics @ 25°C Unless Otherwise Specified

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 ER2A-L-ER2D-L ER2G-L ER2J-L	V <sub>F</sub>	0.95V 1.25V 1.70V	I <sub>FM</sub> =2.0A
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0µA 100uA	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 ER2A-L-ER2D-L ER2G-L ER2J-L	СЈ	30pF 18pF 12pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

### Note:

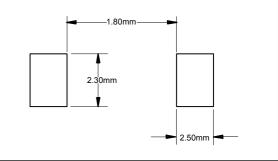
- 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.
- 2. Halogen free "Green"products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

# 2 Amp Super Fast Recovery Rectifier 50 to 600 Volts



DIMENSIONS							
DIM	INCHES		MM		NOTE		
Dilvi	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			
E	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**

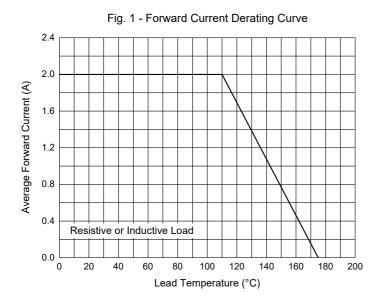


Fig. 3 - Typical Instantaneous Forward Characteristics

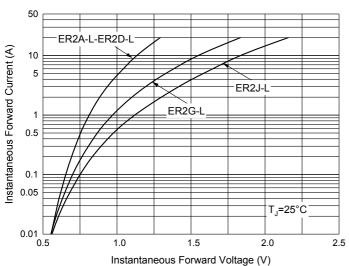


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

60

40

30

20

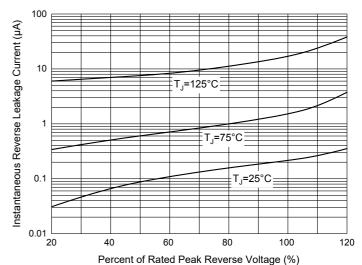
10

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
ER2A-LTP~ER2J-LTP	Tape&Reel: 3Kpcs/Reel	

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