

### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Glass Passivated Chip Junction
- Low Profile Package
- For Surface Mount Applications
- Super Fast Reverse Recovery Time
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 3): 15°C/W Junction to Case
- Typical Thermal Resistance(Note 3): 20°C/W Junction to Lead
- Typical Thermal Resistance(Note 3): 60°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER2DBFL	ER2D	200V	140V	200V
ER2GBFL	ER2G	400V	280V	400V
ER2JBFL	ER2J	600V	420V	600V
ER2KBFL	ER2K	800V	560V	800V

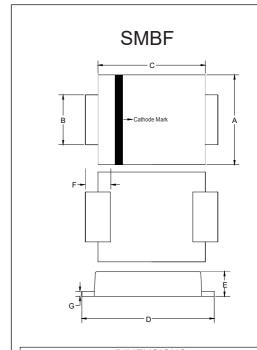
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>L</sub> =75°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ER2DBFL ER2GBFL ER2JBFL ER2KBFL	$V_{F}$	0.95V 1.3V 1.7V 1.85V	I <sub>F</sub> =2.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 100μA	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 ER2DBFL ER2GBFL ER2JBFL~ER2KBFL	CJ	31pF 17pF 12pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

### Note:

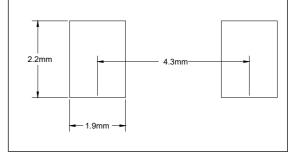
- 1.Halogen free "Green"products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
- 3.Mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

# 2.0 Amp Super Fast Recovery Rectifier 200 to 800 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.134	0.150	3.40	3.80	
В	0.075	0.083	1.90	2.10	
С	0.163	0.175	4.15	4.45	
D	0.201	0.220	5.10	5.60	
E	0.041	0.061	1.05	1.55	
F	0.028	0.053	0.70	1.35	
G	0.006	0.010	0.15	0.25	

# Suggested Solder Pad Layout





# **Curve Characteristics**

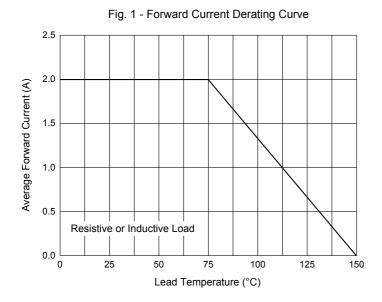


Fig. 3 - Typical Instantaneous Forward Characteristics

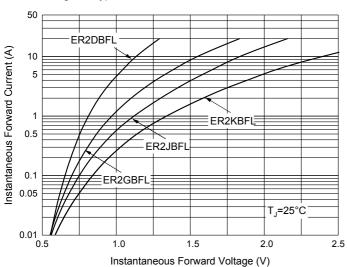


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

40

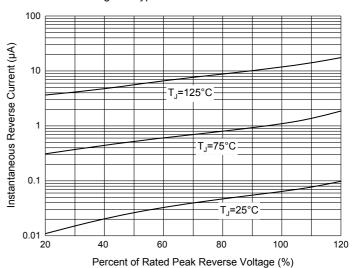
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Characteristics





# **Ordering Information**

Device	Packing	
ER2DBFL-TP ~ ER2KBFL-TP	Tape&Reel: 5Kpcs/Reel	

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