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)

2.0 Amp Super Fast Recovery Rectifier 200 to 800 Volts

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

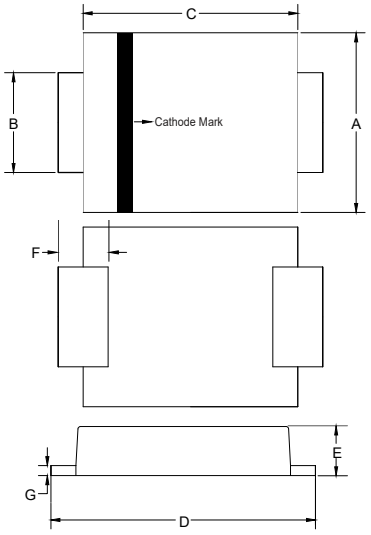
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	T_L=75ºC
Peak Forward Surge Current	I_{FSM}	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ER2DBFL ER2GBFL ER2JBFL ER2KBFL	V_F	0.95V 1.3V 1.7V 1.85V	I_F=2.0A; T_J=25ºC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 100μA	T_J=25ºC T_J=125ºC
Maximum Reverse Recovery Time	t_{rr}	35ns	I_F=0.5A; I_R=1.0A; Irr=0.25A
Typical Junction Capacitance ER2DBFL ER2GBFL ER2JBFL~ER2KBFL	C_J	31pF 17pF 12pF	Measured at 1.0MHz V_R=4.0V

Note:

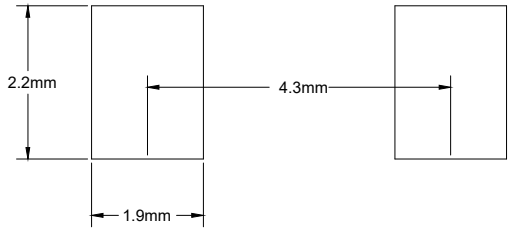
1.Halogen free "Green"products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2.High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
3.Mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

SMBF



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.134	0.150	3.40	3.80	
B	0.075	0.083	1.90	2.10	
C	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. 1 - Forward Current Derating Curve

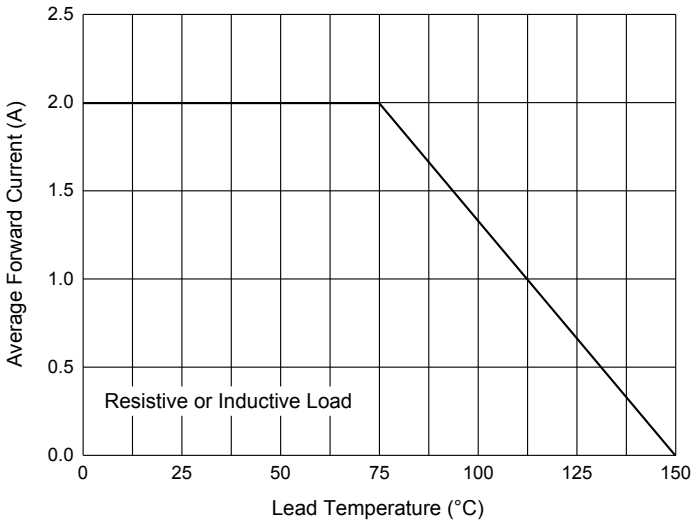


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

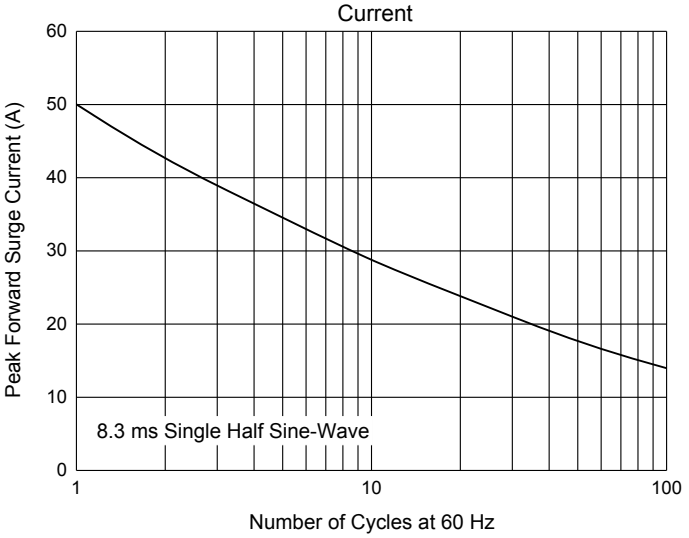


Fig. 3 - Typical Instantaneous Forward Characteristics

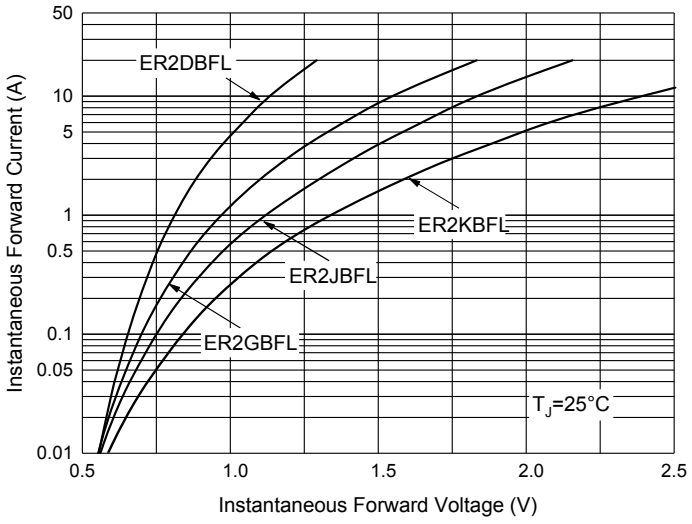
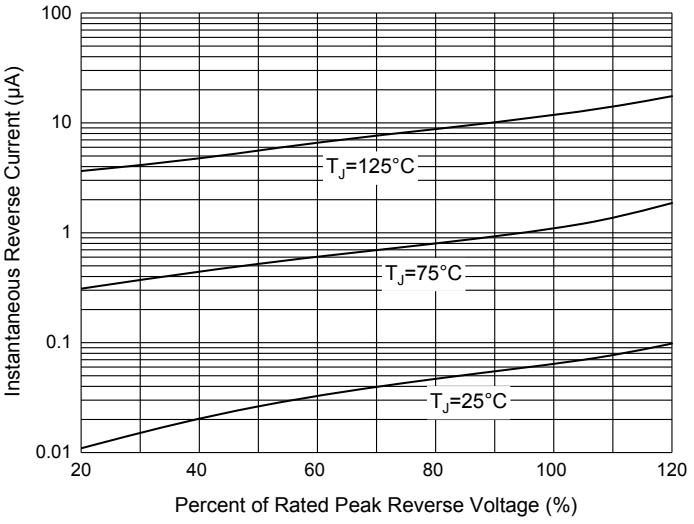


Fig. 4 - Typical Reverse Characteristics



Ordering Information

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC):

ER2DBFL-TP ER2GBFL-TP ER2JBFL-TP ER2KBFL-TP