Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- Super Fast Recovery Times for High Effieciency
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

2 Amp Super Fast Recovery Rectifier 50 to 600 Volts

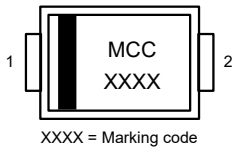
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value					Unit
		ER2A-L	ER2B-L	ER2D-L	ER2G-L	ER2J-L	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Working Peak Reverse Voltage	V_{RWM}						
DC Blocking Voltage	V_R						
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	V
Average Rectified Forward Current @ T_L=110°C	$I_{F(AV)}$	2					A
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I_{FSM}	50					A
Non-Repetitive Peak Surge Current @1ms Half Sine Wave		100					
Current Squared Time @1ms≤t≤8.3ms	I^2t	10.375					A^2s

Marking code

Part Number	Marking code
ER2A-L	ER2A
ER2B-L	ER2B
ER2D-L	ER2D
ER2G-L	ER2G
ER2J-L	ER2J

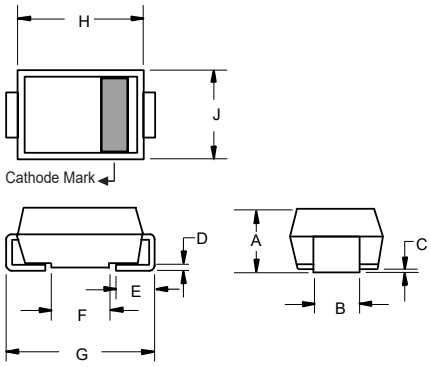
Internal Structure

Pin	Description	Simplified outline	Graphic symbol
1	Cathode	 XXXX = Marking code	
2	Anode		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

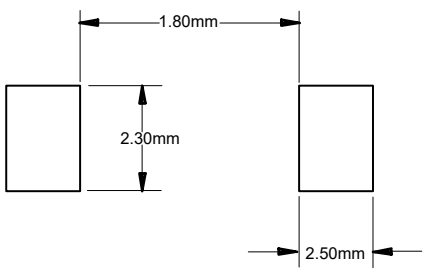
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

SMB (DO-214AA)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	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	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

Suggested Solder Pad Layout



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-65		175	°C
T_{stg}	Storage Temperature Range		-65		175	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		20		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		75		°C/W

Note:
1.Mounted on P.C.B. with 8mm*8mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage ER2A-L ~ ER2D-L ER2G-L ER2J-L	V_F	I_F=2A;T_J=25°C			 0.95 1.25 1.70	V
Reverse Current	I_R	at Rated V_R;T_J=25°C at Rated V_R;T_J=125°C			5 100	uA
Reverse Recovery Time	t_{rr}	I_F=0.5A; I_R=1.0A; I_{rr}=0.25A;T_J=25°C			35	ns
Junction Capacitance ER2A-L ~ ER2D-L ER2G-L ER2J-L	C_J	V_R=4V;f=1MHz;T_J=25°C		 30 18 12		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

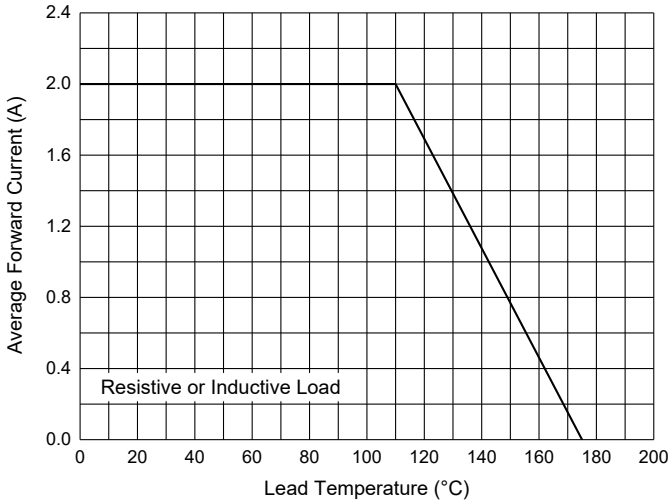


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

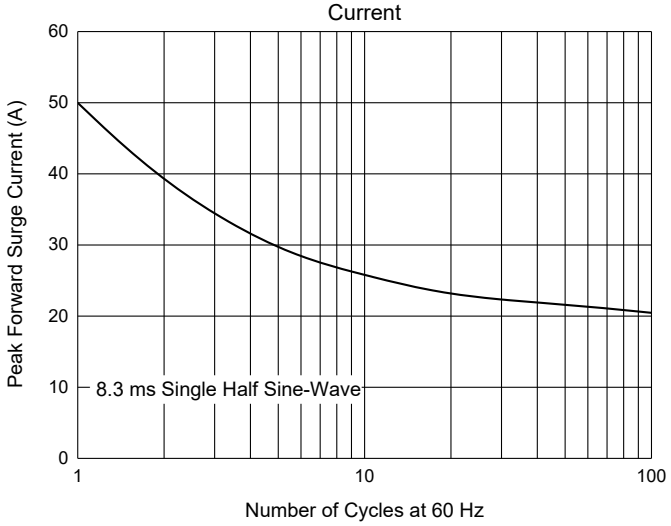


Fig. 3 - Typical Forward Characteristics

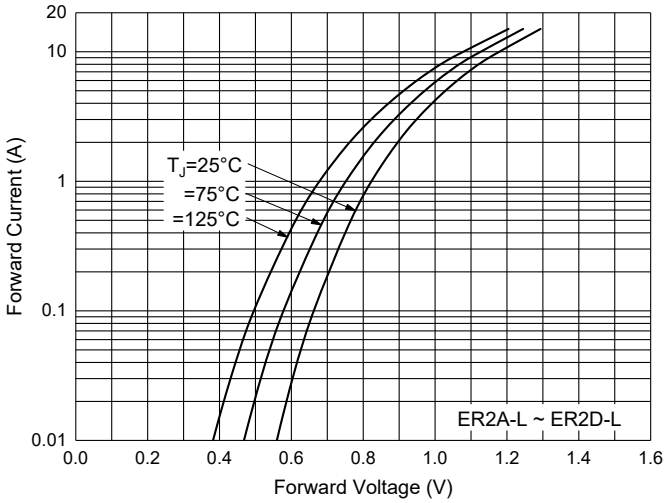


Fig. 4 - Typical Forward Characteristics

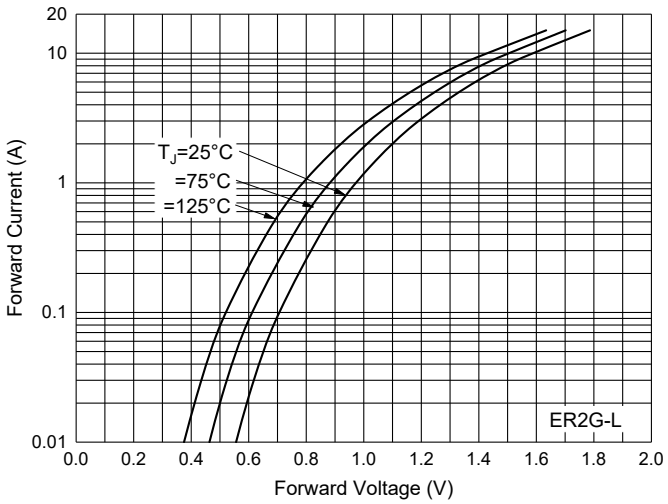


Fig. 5 - Typical Forward Characteristics

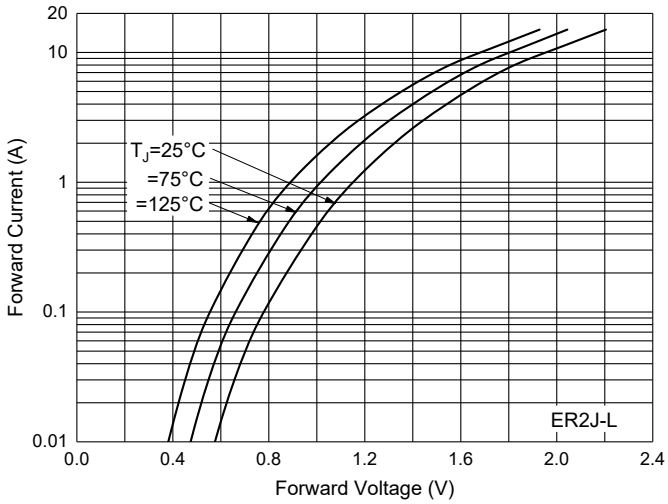
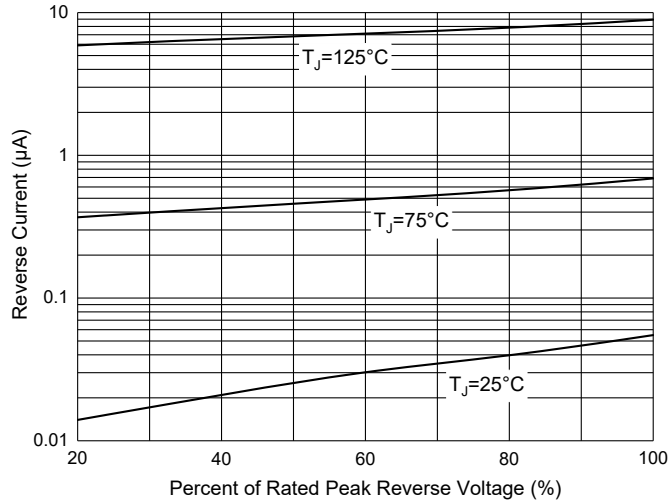
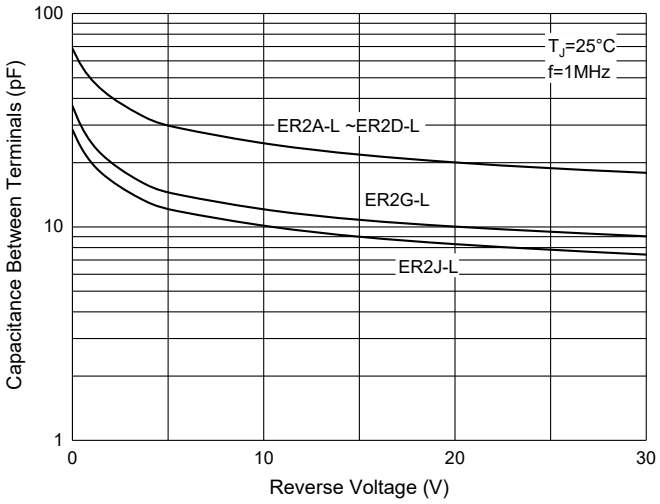


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Capacitance Characteristics



Ordering Information

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