

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

### **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
- Built-in strain relief
- Super fast switching speed under 35ns
- Marking : Cathode band and type number (No '-L' Suffix)

### **Maximum Ratings**

- Operating Temperature: -65℃ to +175℃
- Storage Temperature: -65℃ to +175℃

MCC	Maximum		Maximum DC
Part Number	Recurrent	Maximum	Blocking
	Peak Reverse	RMS Voltage	Voltage
	Voltage	C C	Ū
ER1A-L	50V	35V	50V
ER1B-L	100V	70V	100V
ER1D-L	200V	140V	200V
ER1G-L	400V	280V	400V
ER1J-L	600V	420V	600V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage ER1A-L-ER1D-L ER1G-L ER1J-L	V <sub>F</sub>	.95V 1.25V 1.70V	I <sub>FM</sub> = 1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 80μΑ	T <sub>A</sub> = 25℃ T <sub>A</sub> = 100℃
Maximum Reverse Recovery Time	T <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

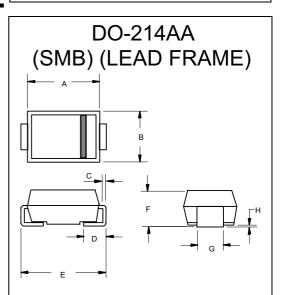
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

## 1 Amp Super Fast Recovery Rectifier 50 to 600 Volts

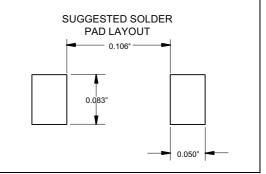
ER1A-L

**THRU** 

ER1J-L



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
А	.160	.185	4.06	4.70		
В	.130	.155	3.30	3.94		
С	.006	.012	0.15	0.31		
D	.030	.060	0.76	1.52		
Е	.200	.220	5.08	5.59		
F	.079	.096	2.00	2.44		
G	.075	.087	1.91	2.21		
н	.002	.008	0.05	0.203		



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**Revision:** A

2011/01/01

# ER1A-L thru ER1J-L

FIG.1-TYPICAL FORWARD



#### **Micro Commercial Components**

140

160

8.3ms Single Hall

Sine Wave

JEDEC method

50

10

5

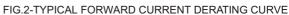
50

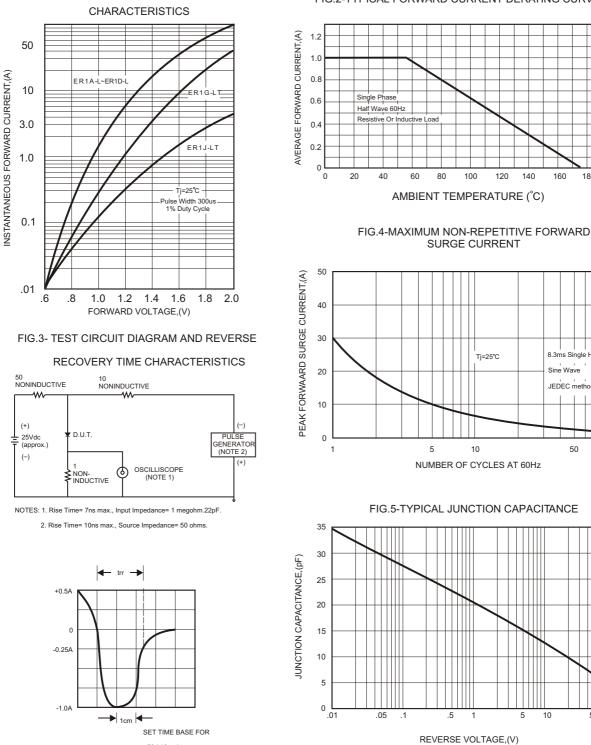
100

100

180

200





50 / 10ns / cm

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### **Ordering Information :**

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

#### **\*\*\*IMPORTANT NOTICE\*\*\***

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MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

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