

# M C C ES2B-L Super Fast Recovery Rectifier Instructions

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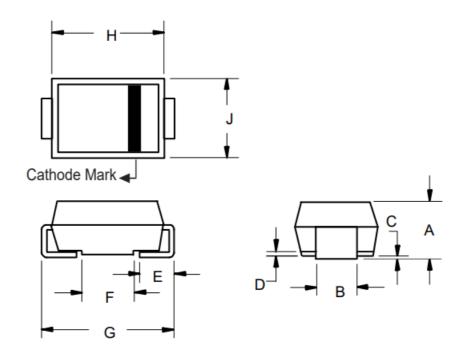


2 Amp Super Fast Recovery Rectifier 50 to 600 Volts SMA (DO-214AC)

# Contents

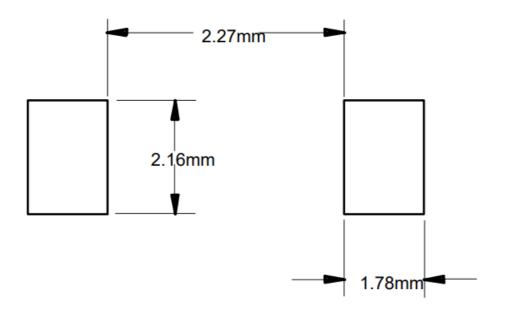
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**ES2B-L Super Fast Recovery Rectifier** 



DIMENSIONS						
DIM	INCHES		ММ		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.075	0.096	1.90	2.		
В	0.050	0.064	1.	2.		
С	0.002	0.008	0.051	0.203		
D	_	0.020	_	0.51		
Е	0.030	0.060	0.76	2.		
F	0.065	0.091	2.	2.		
G	0.189	0.220	4.80	6.		
Н	0.157	0.187	4.00	5.		
J	0.090	0.115	2.	3.		

# SUGGESTED SOLDER PAD LAYOUT



### **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
- Glass Passivated Die Construction
- Halogen Free. "Green" Device (Note 2)

# **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

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Volta ge	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES2A-L	ES2A	50V	35V	50V
ES2B-L	ES2B	100V	70V	100V
ES2C-L	ES2C	150V	105V	150V
ES2D-L	ES2D	200V	140V	200V
ES2G-L	ES2G	400V	280V	400V
ES2J-L	ES2J	600V	420V	600V

Average Forward Current	I F(AV)	2.0A	TL=110°C
Peak Forward Surge Current	I Fsm	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ES2A-L-ES2D-L ES2G-L ES2J-L ES2J-L	VF	0.95V 1.25V 1.70V 0.975V(Typ) 1.25V(Max)	IFm=2.0A, TA=25°C IFm=2.0A, TA=25°C IFNA =2.0A; TA=25°C IFM=2.OA; TA=150°C IFM=2.OA; TA=150°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	1.OpA 100uA TA=25°C;	TA=125°C
Maximum Reverse Recovery Time	try	35ns	IF=0.5A; IR=1.0A; Irr=0.25A
Typical Junction Capacitance	Cj	15pF	Measured at 1.0MHz VR=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.

# **Curve Characteristics**

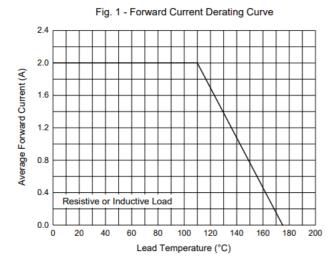


Fig. 3 - Typical Instantaneous Forward Characteristics

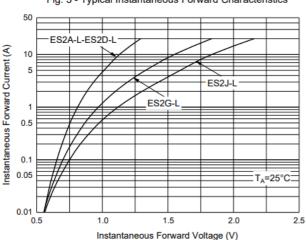


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

40

40

40

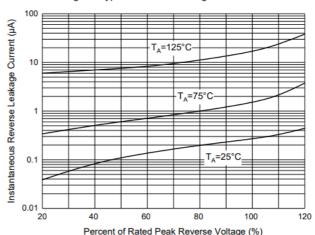
40

10

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics



#### **Ordering Information**

Device	Packing	
ES2A-LTP~ES2J-LTP	Tape&Reel: 5Kpcs/Reel	

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#### **Documents / Resources**



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ES2B-L Super Fast Recovery Rectifier, ES2B-L, Super Fast Recovery Rectifier, Fast Recovery Rectifier, Rectifier

#### References

- MCC
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Manuals+,