

**Micro Commercial Components** 



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# ES2A-L **THRU** ES2J-L

### 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
- Super fast switching speed under 35ns
- Marking: Cathode band and type number (No '-L' Suffix)
- Halogen free available upon request by adding suffix "-HF"

- Operating Temperature: -65 $^{\circ}$ C to +175 $^{\circ}$ C
- Storage Temperature: -65 $^{\circ}$ C to +175 $^{\circ}$ C

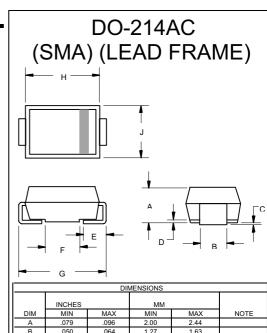
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES2A-L	50V	35V	50V
ES2B-L	100V	70V	100V
ES2C-L	150V	105V	150V
ES2D-L	200V	140V	200V
ES2G-L	400V	280V	400V
ES2J-L	600V	420V	600V

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

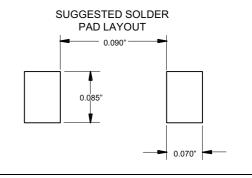
Average Forward Current	$I_{F(AV)}$	2.0A	T <sub>L</sub> = 110°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage ES2A-L-ES2D-L ES2G-L ES2J-L ES2J-L	V <sub>F</sub>	.95V 1.25V 1.70V .975V(Typ) 1.25V(Max)	I <sub>FM</sub> = 2.0A;T <sub>J</sub> =25°C I <sub>FM</sub> = 2.0A;T <sub>J</sub> =150°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μA 1mA	T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C
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	C <sub>J</sub>	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

# 2 Amp Super Fast **Recovery Rectifier** 50 to 600 Volts



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.079	.096	2.00	2.44		
В	.050	.064	1.27	1.63		
С	.002	.008	.05	.20		
D		.02		.51		
Ш	.030	.060	.76	1.52		
F	.065	.091	1.65	2.32		
Ð	.189	.220	4.80	5.59		
H	.157	.181	4.00	4.60		
J	.090	.115	2.25	2.92		

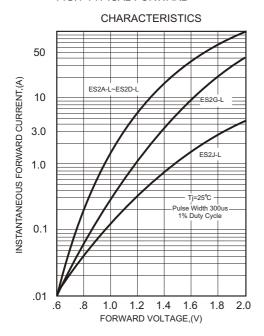


## ES2A-Lthru ES2J-L



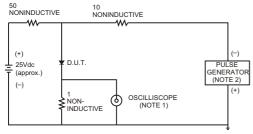
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#### FIG.1-TYPICAL FORWARD



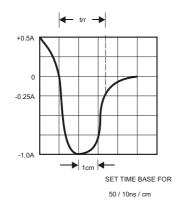
### FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE

#### RECOVERY TIME CHARACTERISTICS

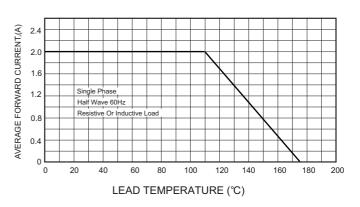


NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF

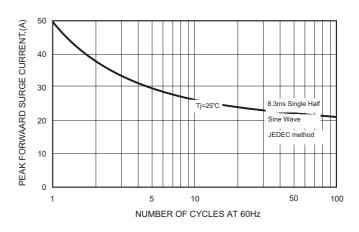
2. Rise Time= 10ns max., Source Impedance= 50 ohms



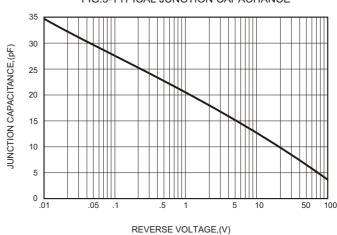
#### FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



#### FIG.5-TYPICAL JUNCTION CAPACITANCE





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### **Ordering Information:**

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

Note: Adding "-HF" suffix for halogen free, eg. ES2A-LTP-HF~ES2J-LTP-HF

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