

Micro Commercial Components



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ES1A-L **THRU** ES1J-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
- Built-in strain relief
- Super fast switching speed under 35ns
- Marking: Cathode band and type number (No '-L' Suffix)
- Halogen free available upon request by adding suffix "-HF"

aximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

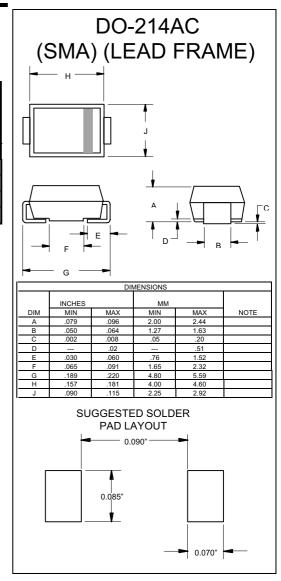
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES1A-L	50V	35V	50V
ES1B-L	100V	70V	100V
ES1D-L	200V	140V	200V
ES1G-L	400V	280V	400V
ES1J-L	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T _L = 125°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage ES1A-L-ES1D-L ES1G-L ES1J-L	V _F	.95V 1.25V 1.70V	I _{FM} = 1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5μA 80μA	$T_A = 25^{\circ}\mathbb{C}$ $T_A = 100^{\circ}\mathbb{C}$
Maximum Reverse Recovery Time	T _{rr}	35ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A
Typical Junction Capacitance	C _J	15pF	Measured at 1.0MHz, V _R =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



ES1A-L thru ES1J-L



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FIG.1-TYPICAL FORWARD

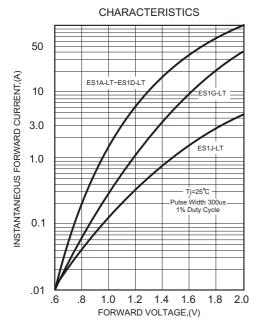
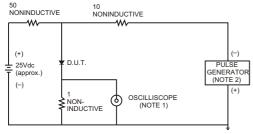


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE

RECOVERY TIME CHARACTERISTICS



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

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

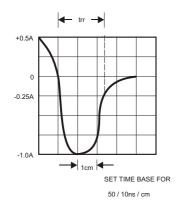


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

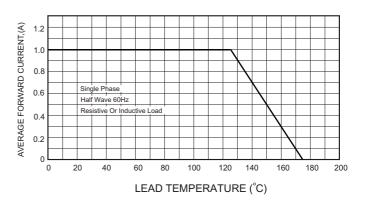


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

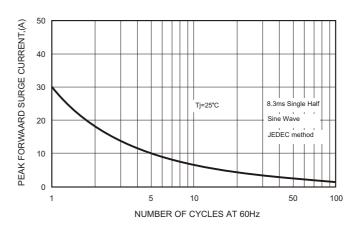
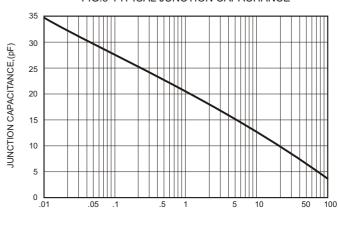


FIG.5-TYPICAL JUNCTION CAPACITANCE





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Ordering Information:

Device	Packing	
ES1A-LTP~ES1J-LTP	Tape&Reel: 5Kpcs/Reel	

Note: Adding "-HF" suffix for halogen free, eg. ES1A-LTP-HF~ES1J-LTP-HF

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