

#### **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
- Thermal Resistance: 18°C/W Junction to Case(Note3)
- Thermal Resistance: 20°C/W Junction to Lead(Note3)
- Thermal Resistance: 65°C/W Junction to Ambient(Note3)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	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

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

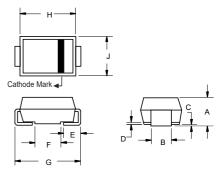
Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>L</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ES2A-L-ES2D-L ES2G-L ES2J-L ES2J-L	V <sub>F</sub>	0.95V 1.25V 1.70V 0.975V(Typ) 1.25V(Max)	I <sub>FM</sub> =2.0A; T <sub>A</sub> =25°C I <sub>FM</sub> =2.0A; T <sub>A</sub> =25°C I <sub>FM</sub> =2.0A; T <sub>A</sub> =25°C I <sub>FM</sub> =2.0A; T <sub>A</sub> =150°C I <sub>FM</sub> =2.0A; T <sub>A</sub> =150°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	1.0µA 100uA	T <sub>A</sub> =25°C; T <sub>A</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz V <sub>R</sub> =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.
- 3. Mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas.

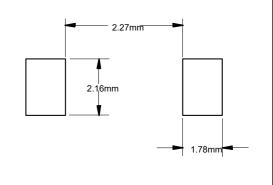
# 2 Amp Super Fast Recovery Rectifier 50 to 600 Volts

# SMA (DO-214AC)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.075	0.096	1.90	2.44	
В	0.050	0.064	1.27	1.63	
С	0.002	0.008	0.051	0.203	
D		0.020		0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.189	0.220	4.80	5.59	
Н	0.157	0.187	4.00	4.75	
J	0.090	0.115	2.25	2.92	

#### SUGGESTED SOLDER PAD LAYOUT





# **Curve Characteristics**

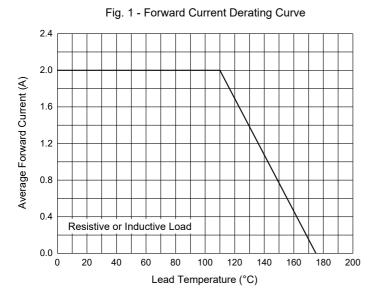


Fig. 3 - Typical Instantaneous Forward Characteristics

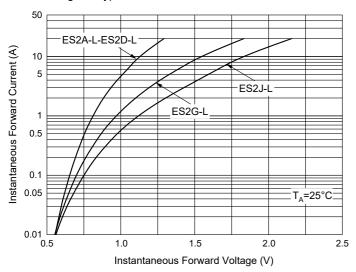


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

60

40

40

30

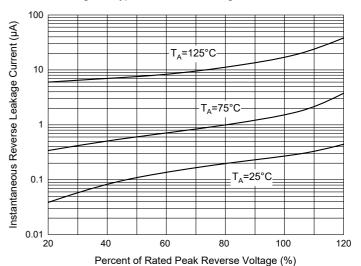
10

8.3 ms Single Half Sine-Wave

0

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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