



Micro Commercial Components

ES2A THRU ES2M

**2 Amp Ultra Fast
Recovery
Silicon Rectifier
50 to 1000 Volts**

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Superfast Recovery Times For High Efficiency

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 20°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| ES2A | ES2A | 50V | 35V | 50V |
| ES2B | ES2B | 100V | 70V | 100V |
| ES2C | ES2C | 150V | 105V | 150V |
| ES2D | ES2D | 200V | 140V | 200V |
| ES2G | ES2G | 400V | 280V | 400V |
| ES2J | ES2J | 600V | 420V | 600V |
| ES2K | ES2K | 800V | 560V | 800V |
| ES2M | ES2M | 1000V | 700V | 1000V |

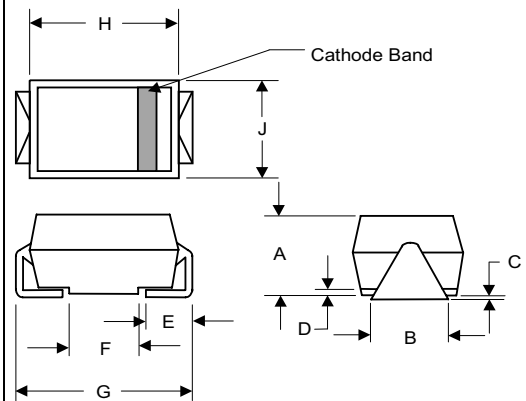
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|--|--|
| Average Forward Current | $I_{F(AV)}$ | 2.0A | $T_J = 75^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 50A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | ES2A-D 1.35V ES2G-J 1.70V ES2K-M | $I_{FM} = 2.0\text{A};$ $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5 μA 150 μA | $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ |
| Maximum Reverse Recovery Time | T_{rr} | 50ns 60ns 100ns | $I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$ |
| Typical Junction Capacitance | C_J | 25pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

*Pulse test: Pulse width 200 μsec , Duty cycle 2%

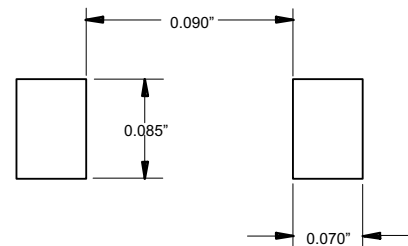
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AC (HSMA) (High Profile)



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .078 | .116 | 1.98 | 2.95 | |
| B | .067 | .089 | 1.70 | 2.25 | |
| C | .002 | .008 | .05 | .20 | |
| D | --- | .02 | --- | .51 | |
| E | .035 | .055 | .89 | 1.40 | |
| F | .065 | .096 | 1.65 | 2.45 | |
| G | .205 | .224 | 5.21 | 5.69 | |
| H | .160 | .180 | 4.06 | 4.57 | |
| J | .100 | .112 | 2.57 | 2.84 | |

SUGGESTED SOLDER PAD LAYOUT





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Ordering Information

| | |
|------------------|----------------------|
| Device | Packing |
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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