

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- · Glass Passivated Chip
- Super Fast Switching For High Efficiency
- Low Reverse Leakage Current
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

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

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|------------------------|-----------------------------------|
| US2AA | US2A | 50V | 35V | 50V |
| US2BA | US2B | 100V | 70V | 100V |
| US2CA | US2C | 150V | 105V | 150V |
| US2DA | US2D | 200V | 140V | 200V |
| US2GA | US2G | 400V | 280V | 400V |
| US2JA | US2J | 600V | 420V | 600V |
| US2KA | US2K | 800V | 560V | 800V |
| US2MA | US2M | 1000V | 700V | 1000V |

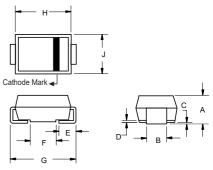
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 2.0A | T _L =110°C |
|---|--------------------|----------------------|--|
| Peak Forward Surge Current | I _{FSM} | 50A | 8.3ms,Half Sine |
| Maximum Instantaneous Forward Voltage US2AA-US2DA US2GA US2JA-US2MA | V _F | 1.0V 1.4V 1.7V | I _{FM} =2.0A; T _A =25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 5.0µA 50µA | T _A =25°C; T _A =125°C |
| Maximum Reverse Recovery Time US2AA-US2GA US2JA-US2MA | Trr | 50ns 75ns | I _F =0.5A; I _R =1.0A; Irr=0.25A |
| Typical Junction Capacitance | С | 28pF | Measured at 1.0MHz, V _R =4.0V |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

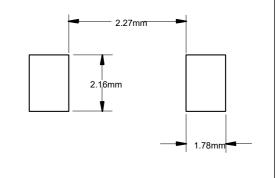
2 Amp Ultra Fast Rectifier 50 to 1000 Volts

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

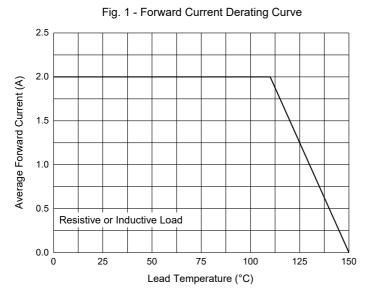
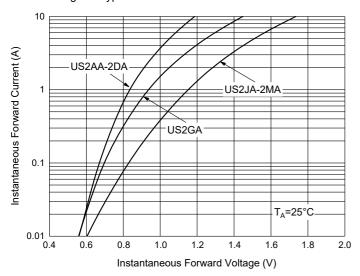


Fig. 3 - Typical Instantaneous Forward Characteristics



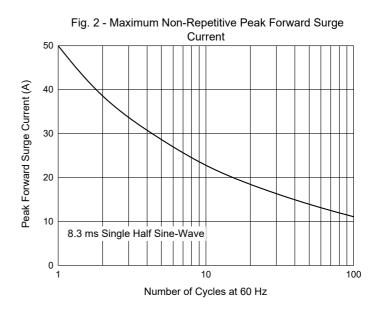
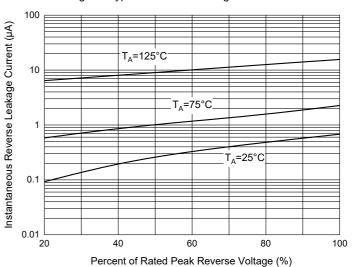


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

| Device | Packing | |
|----------------|-----------------------|--|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel | |

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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