



# THE DATASHEET OF US2MA-TP





Micro Commercial Components



Micro Commercial Components
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US2AA
THRU
US2MA

2 Amp Ultra Fast
Rectifier
50 to 1000 Volts

Features

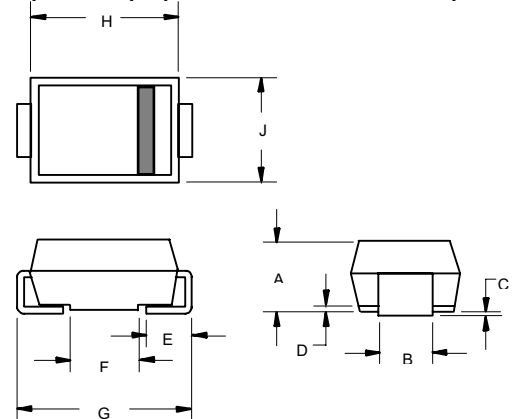
- Halogen free available upon request by adding suffix "-HF"
Glass Passivated Chip
Super Fast Switching For High Efficiency
Low Forward Voltage Drop And High Current Capability
Low Reverse Leakage Current
Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1

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

Table with 5 columns: MCC Catalog Number, Device Marking, Maximum Recurrent Peak Reverse Voltage, Maximum RMS Voltage, Maximum DC Blocking Voltage. Rows include US2AA, US2BA, US2CA, US2DA, US2GA, US2JA, US2KA, US2MA.

DO-214AC
(SMA) (LEAD FRAME)

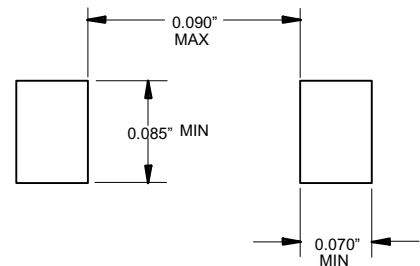


Electrical Characteristics @ 25°C Unless Otherwise Specified

Table with 4 columns: Parameter, Symbol, Value, Conditions. Rows include Average Forward Current, Peak Forward Surge Current, Maximum Instantaneous Forward Voltage, Maximum DC Reverse Current At Rated DC Blocking Voltage, Maximum Reverse Recovery Time, Typical Junction Capacitance.

Dimensions table with columns: DIM, INCHES (MIN, MAX), MM (MIN, MAX), NOTE. Rows include dimensions A through J.

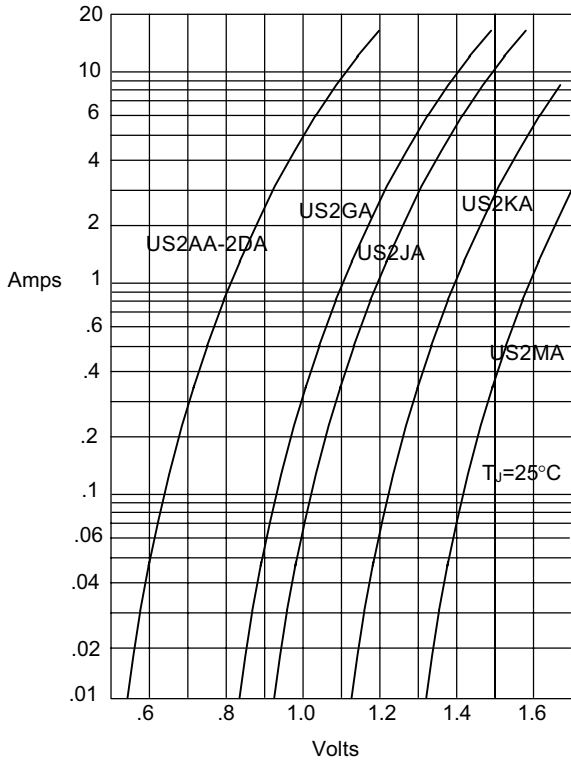
SUGGESTED SOLDER PAD LAYOUT



\*Pulse test: Pulse width 300 µsec, Duty cycle 1%
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

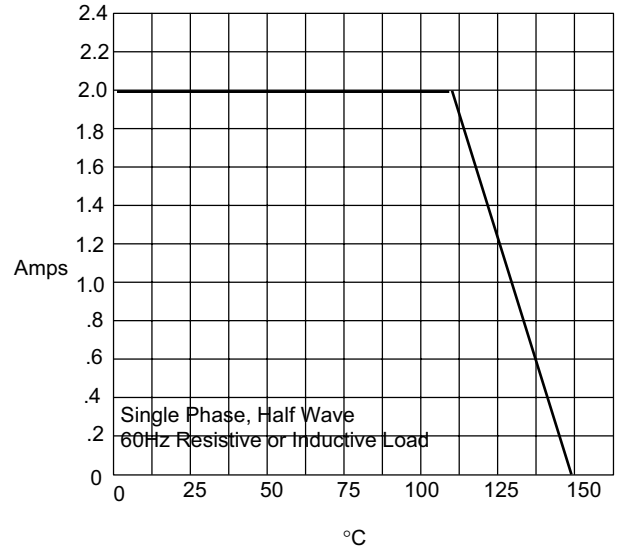
# US2AA thru US2MA

Figure 1  
Typical Forward Characteristics



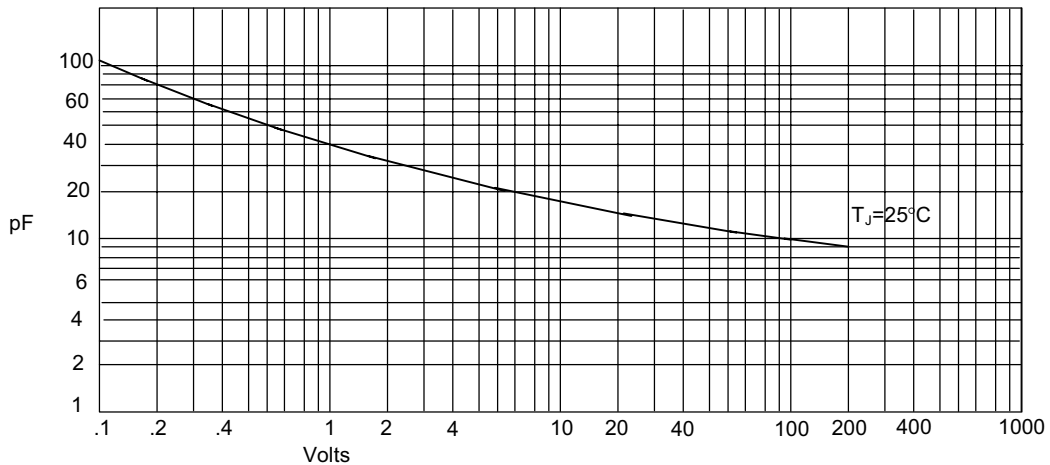
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Lead Temperature -  $^\circ\text{C}$

Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

# US2AA thru US2MA

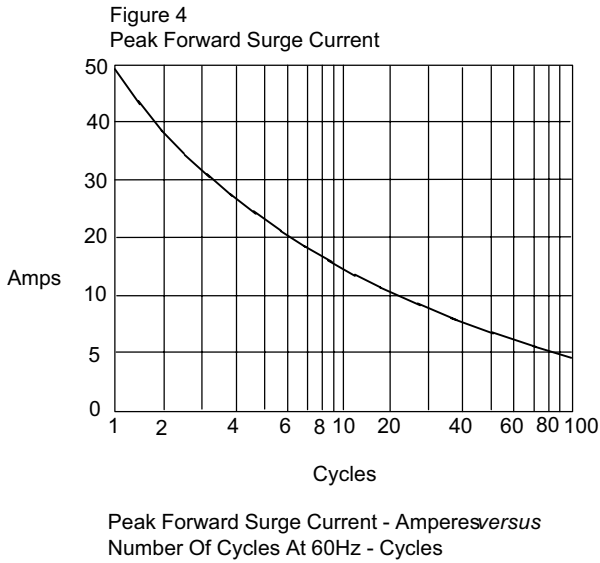
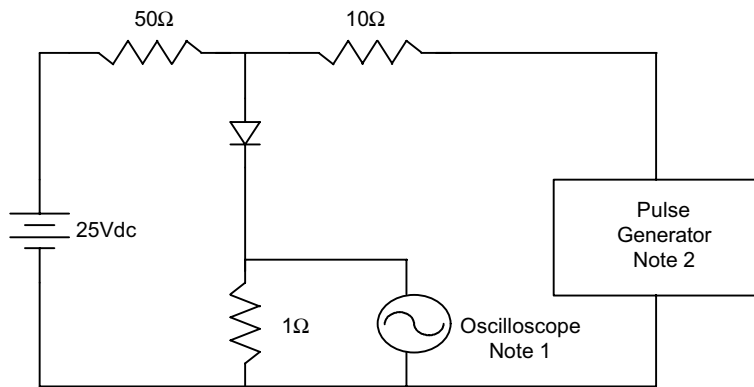
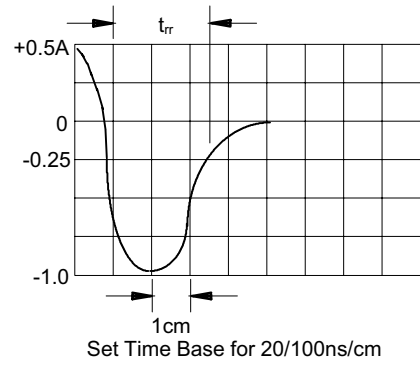


Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive





TM

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### 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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