



THE DATASHEET OF US1A-TP





Micro Commercial Components



Micro Commercial Components
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US1A
THRU
US1M

Features

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

Maximum Ratings

- Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Maximum Thermal Resistance; 30°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 US1A through US1M.

Electrical Characteristics @ 25°C Unless Otherwise Specified

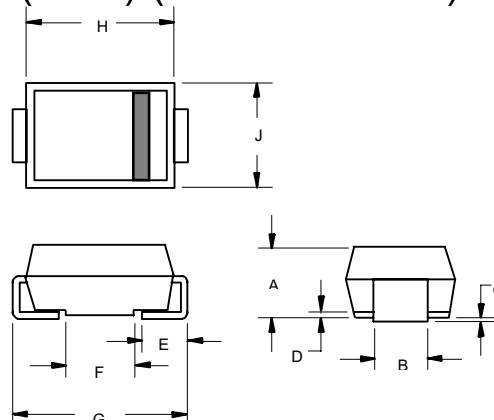
Table with 4 columns: Parameter, Symbol, Value, Conditions. Rows include Average Forward Current, Peak Forward Surge Current, Maximum Instantaneous Forward Voltage, Maximum DC Reverse Current, Maximum Reverse Recovery Time, and Typical Junction Capacitance.

*Pulse test: Pulse width 300 sec, Duty cycle 1%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

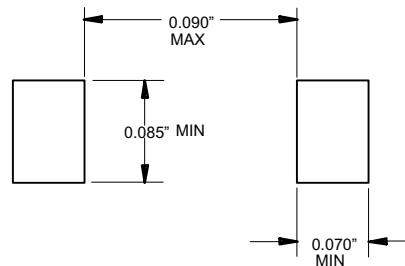
1 Amp Ultra Fast Rectifier
50 to 1000 Volts

DO-214AC
(SMA) (LEAD FRAME)



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

SUGGESTED SOLDER PAD LAYOUT



US1A thru US1M

Figure 1
Typical Forward Characteristics

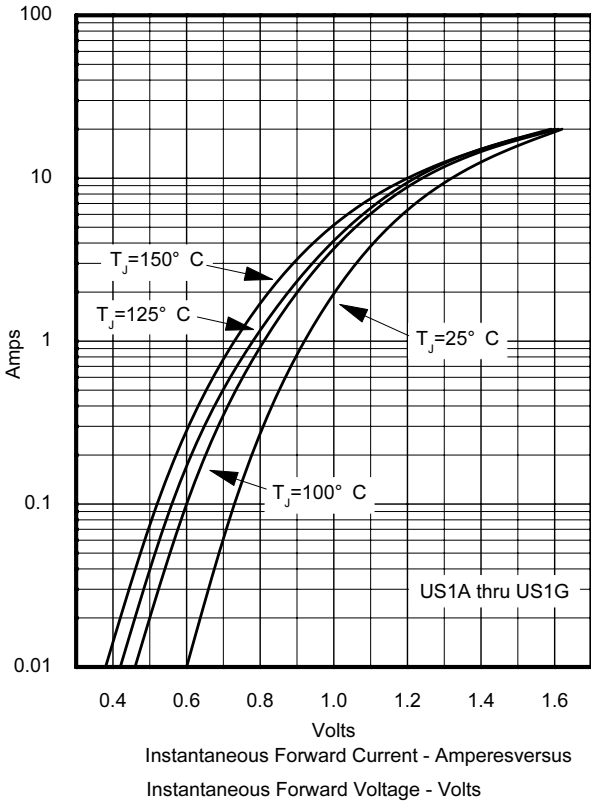


Figure 2
Typical Forward Characteristics

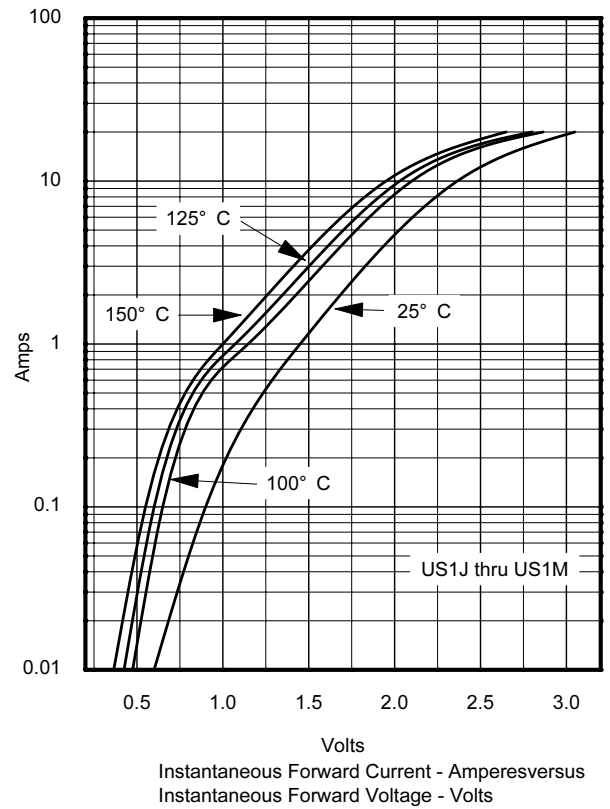


Figure 3
Forward Derating Curve

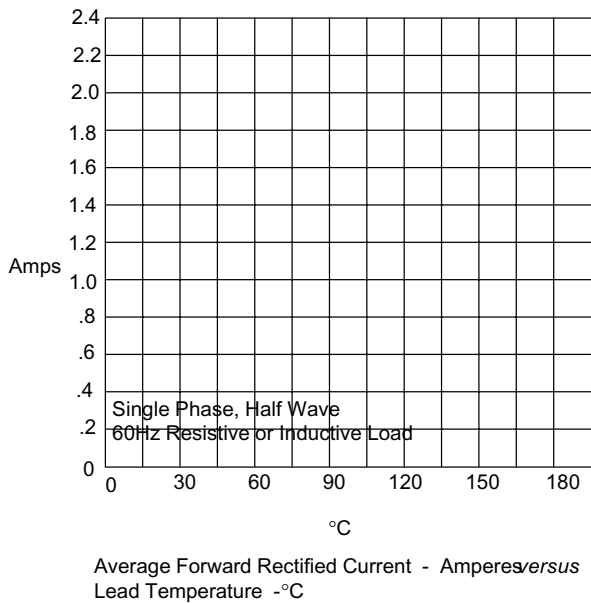


Figure 4
Junction Capacitance

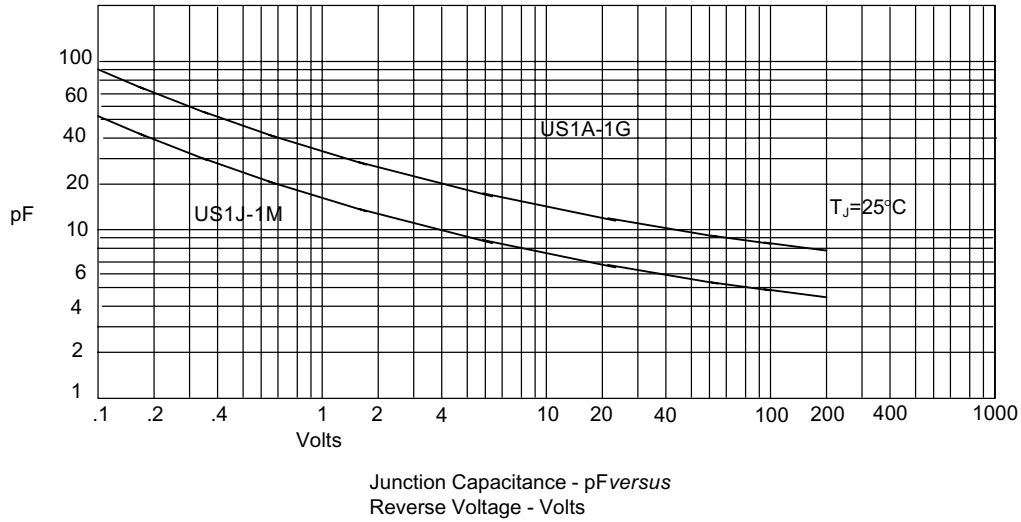


Figure 5
Peak Forward Surge Current

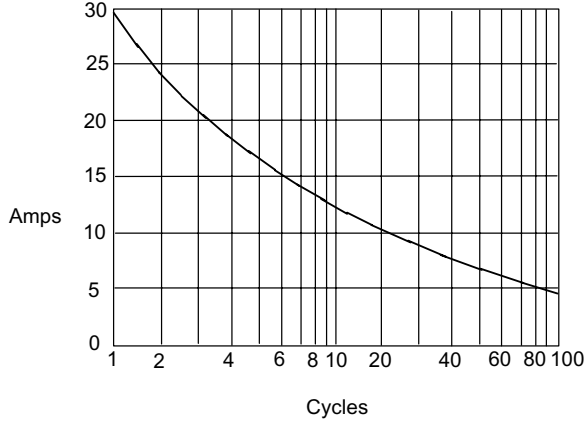


Figure 6
Peak Forward Surge Current

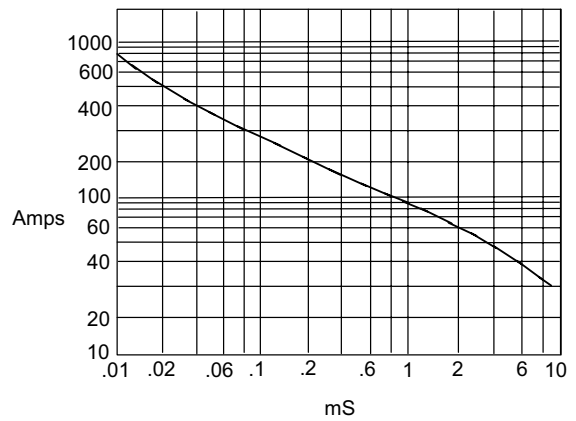
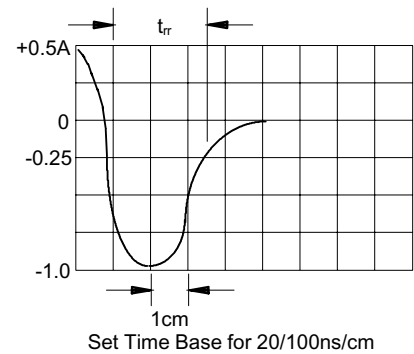
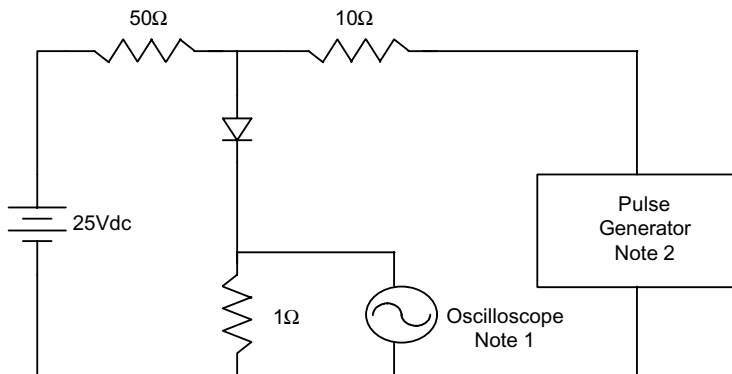


Figure 7
Reverse Recovery Time Characteristic And Test Circuit Diagram



- 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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