



2A SURFACE MOUNT ULTRA FAST RECTIFIERS

UF2A - UF2M



DO-214AA (SMB)

Surface Mount Plastic Package

Polarity: Colour band denotes cathode end

FEATURES

- 1). Glass Passivated Chip
- 2). Low Reverse Leakage
- 3). High Forward Surge Current Capability
- 4). Ultra Fast Switching for High Efficiency
- 5). The Plastic Package carries Underwriters Laboratory Flammability Classification 94V-O.
- 6). High Temperature Soldering Guaranteed: 250°C/10 seconds at teminals.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

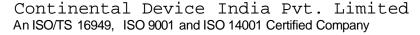
(Ratings at T_A=25°C Ambient Temperature unless otherwise specified.)

Single Phase, Half Wave, 60Hz, Resistive or Inductive Load. For Capacitive Load, Derate Current by 20%.

CHARACTERISTICS	SYMBOL	UF2A	UF2B	UF2D	UF2G	UF2J	UF2K	UF2M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _L =110°C	I _(AV)	2.0							А
Peak Forward Surge Current 8.3ms Single Half Sine -Wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50							А
Maximum Instantaneous Forward Voltage at 2.0A	V _F		1		1.3		1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^{\circ}C$	I _R	5.0 100.0							μΑ
Maximum Reverse Recovery Time (Note 1)	t _{rr}	50 75						ns	
Typical Junction Capacitance (Note 2)	Cj	20							pF
Typical Thermal Resistance (Note 3)	R _{0J-A}	50							°C/W
Operating Junction and Storage Temperature Range	T _J , T _{stg}	-65 to +150							°C

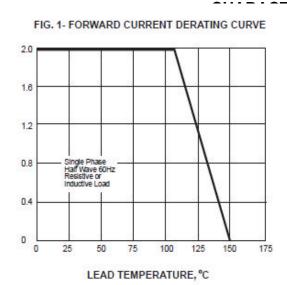
- Note 1. Reverse Recovery Condition I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
- Note 2. Measured at 1.0MHz and Applied Average Voltage of 4.0V DC.
- Note 3. PCB mounted with 0.2 X 0.2" (5.0 X 5.0mm) copper pad area



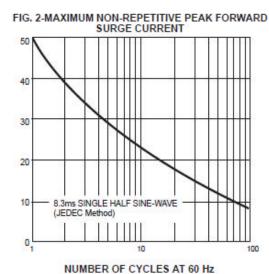












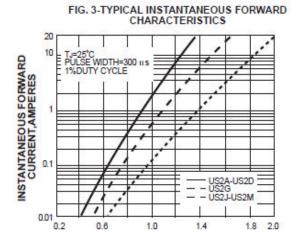
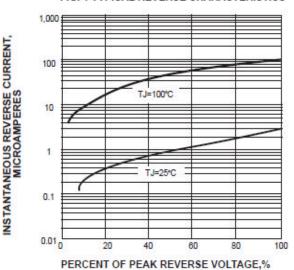


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLEAGE, VOLTS

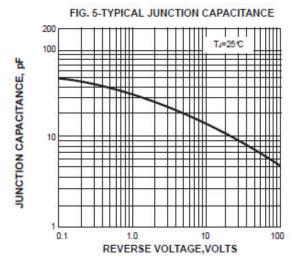
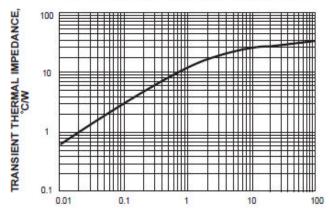


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



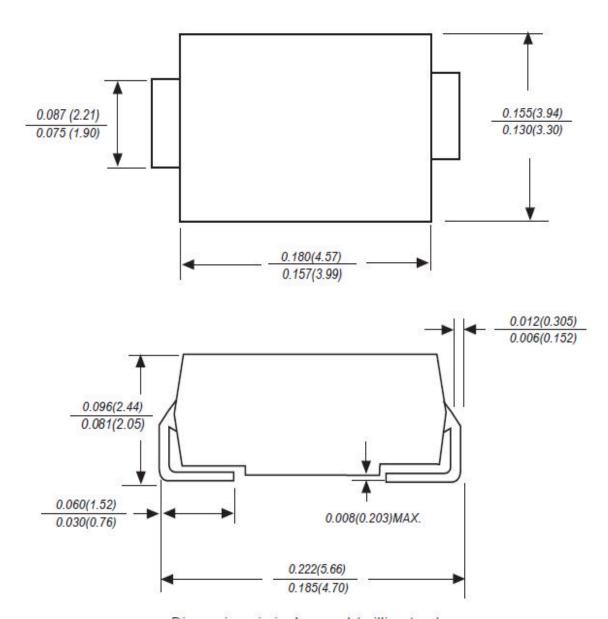
t,PULSE DURATION,sec.

UF2A_UF2M Rev 1_05122016E
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DO-214AA (SMB) PACKAGE OUTLINE AND DIMENSION



Dimensions in inches and (millimeters)



Continental Device India Pvt. Limited An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Component Disposal Instructions

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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Data Sheet