

# US2A-M

## SURFACE MOUNT ULTRAFAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 2.0 Ampere

### Features

- · Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- · Glass passivated chip junctions
- · Ultrafast recovery times for high efficiency
- · Low forward voltage, low power loss
- High temperature soldering guaranteed:
- · 260°C/10 seconds on terminals
- RoHS compliant package

### **Mechanical Data**

- Case: JEDEC DO-214AA molded plastic body
- Terminals: Solder plated, solderable per

### MIL-STD-750, Method 2026

- · Polarity: Color band denotes cathode end
- · Weight: 0.093 gram

Package type : SMB

### **Packing & Order Information**

3,000/Reel





### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified										
		US2A	US2B	US2D	US2G	US2J	US2K	US2M	UNITS	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V <sub>RWS</sub>	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	100	V	
Maximum average forward rectified									A	
current at T <sub>L</sub> =110°C	IF(AV)	2								
Peak forward surge current 8.3ms single	1	30							A	
half-sine-wave	IFSM									





## 10

**Graphic symbol** 

1 • • 2 CATHODE ANODE

#### Publication Order Number: [US2A-M]



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Ratings at 25°C ambient temperature unless otherwise specified										
		US2A	US2B	US2D	US2G	US2J	US2K	US2M	UNITS	
Maximum instantaneous forward voltage	Ň	4.0 4.7								
at I <sub>FM</sub> =2.0A	VF	1.0				1.7			V	
Maximum DC reverse current TJ=25°C	1-	10							uA	
At rated DC blocking voltage TA=100°C	IR	50								
Maximum reverse recovery time	Trr	50				75			nS	
Typical junction capacitance	Cj	17				15			pF	
Maximum thermal resistance	R <sub>0JA</sub>	35						°C/W		
	Rejl	27					°C/W			
Storage temperature range	Tstg	-55 to +150					°C			

NOTE : 1.Pulse test: Pulse width 300us, duty cycle 1%



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## **EFFICIENT RECTIFIER**

Ratings and Characteristic Curves





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