

# US2A THRU US2M

## 2.0 AMP SURFACE MOUNT HIGH EFFICIENCY RECTIFIERS



### **FEATURES**

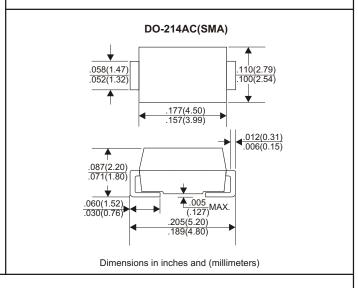
- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Fast switching speed

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 grams

## VOLTAGE RANGE 50 to 800 Volts CURRENT

1.0 Ampere



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	US2A	US2B	US2D	US2E	US2G	US2J	US2K	US2M	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current									
.375"(9.5mm) Lead Length at Ta=50°C	2.0							Α	
Peak Forward Surge Current, 8.3 ms single half sine-wave									
superimposed on rated load (JEDEC method)	60						Α		
Maximum Instantaneous Forward Voltage at 2.0A		1.0		1.3		1.85		V	
Maximum DC Reverse Current Ta=25°C	5.0						μΑ		
at Rated DC Blocking Voltage Ta=100°C	150							μΑ	
Maximum Reverse Recovery Time (Note 1)	50 70				nS				
Typical Junction Capacitance (Note 2)	30							pF	
Operating and Storage Temperature Range T <sub>J</sub> , Tsτ <sub>G</sub>	-65—+150								°C

#### NOTES:

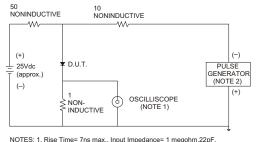
- 1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
- 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

REV 1.0 2015 JAN PAGE:1/2

### RATING AND CHARACTERISTIC CURVES (US2A THRU US2M)

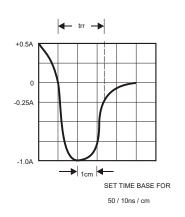
FIG.1-TYPICAL FORWARD **CHARACTERISTICS** 10 INSTANTANEOUS FORWARD CURRENT, (A) 1.0 .1 Tj=25℃ Pulse Width 300us 1% Duty Cycle .01 .001 .6 .8 1.0 1.2 1.4 FORWARD VOLTAGE,(V)

FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

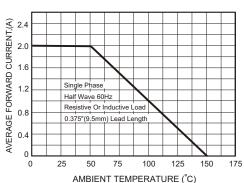


NOTES: 1. Rise Time= /ns max., Input Impedance= 1 megohm.22p

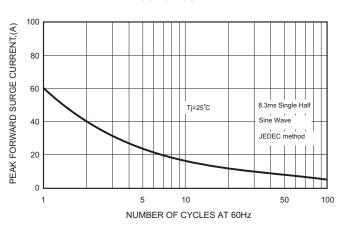
2. Rise Time= 10ns max., Source Impedance= 50 ohms



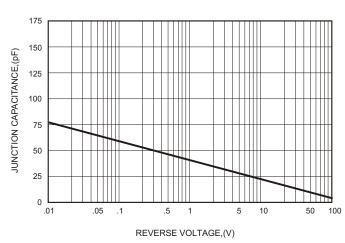
# FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



#### FIG.5-TYPICAL JUNCTION CAPACITANCE



## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Rectifiers category:

Click to view products by GOODWORK manufacturer:

Other Similar products are found below:

70HFR40 FR105 R0 RL252-TP 150KR30A 1N5397 1N4002G 1N4005-TR UFS120Je3/TR13 JANS1N6640US 481235F

RRE02VS6SGTR 067907F MS306 70HF40 T110HF60 T85HFL60S02 US2JFL-TP A1N5404G-G CRS12(T5L,TEMQ) ACGRB207-HF

CLH07(TE16L,Q) CLH03(TE16L,Q) ACGRC307-HF ACEFC304-HF NTE6356 NTE6359 85HFR60 40HFR60 70HF120 85HFR80

D126A45C SCF7500 D251N08B SCHJ22.5K SM100 SCPA2 SDHD5K ACGRA4001-HF ACURA107-HF D1821SH45T PR D1251S45T

NTE6358 NTE5850 NTE5819 NTE5837 NTE5892 NTE5900 NTE5911 NTE5915 NTE5921