



2.0Amp Ultra Fast Recovery Surface Mounted Rectifiers

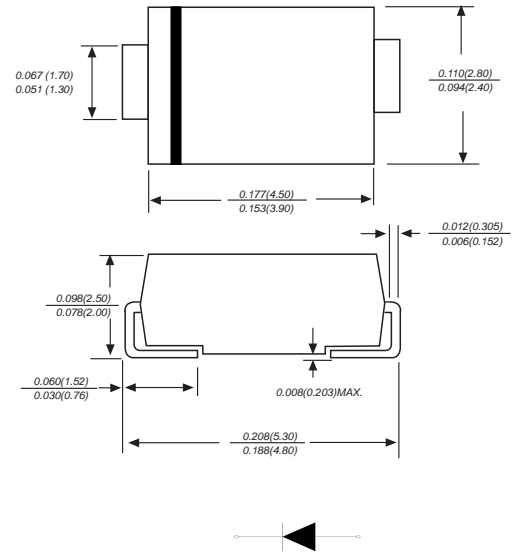
DO-214AC/SMA **RoHS COMPLIANT** **Pb-Free**

**Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

**Mechanical Data**

**Case** : Molded plastic body  
**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026  
**Polarity** : Polarity symbol marking on body  
**Mounting Position** : Any  
**Weight** : 0.0023 ounce, 0.07 grams



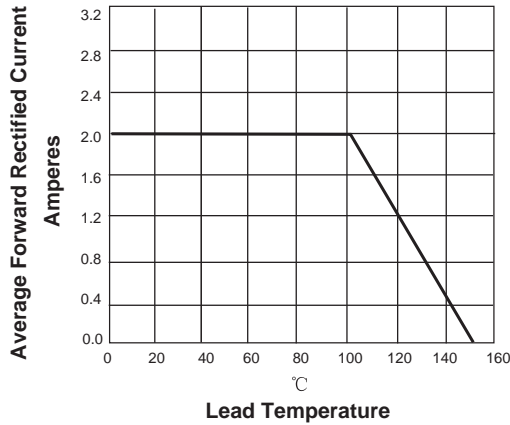
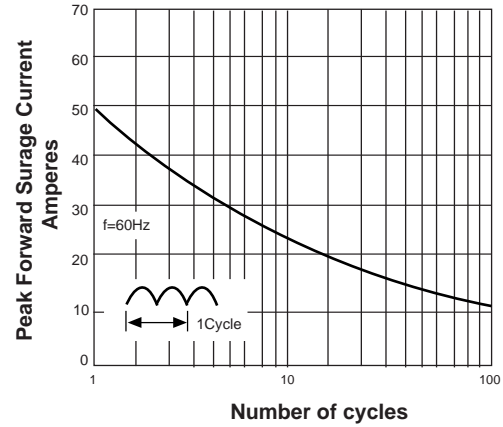
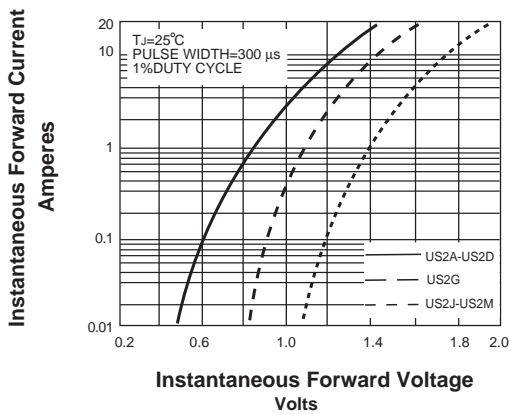
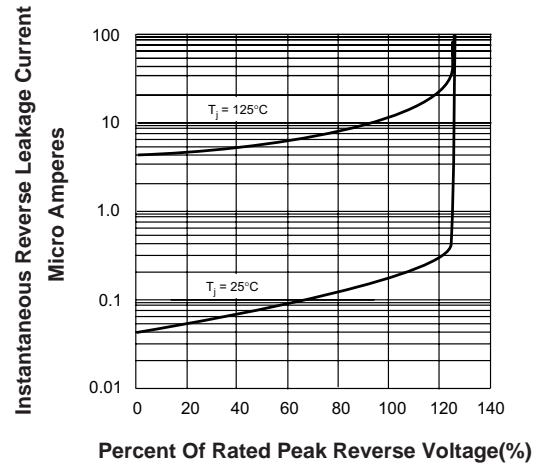
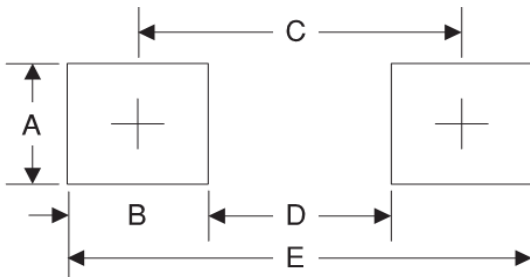
Dimensions in inches and (millimeters)

**Maximum Ratings And Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	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>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T <sub>L</sub> =100°C	I <sub>(AV)</sub>	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50.0							A
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.0		1.4		1.7		V	
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500							uA
Maximum reverse recovery time(Note 1)	T <sub>rr</sub>	50				75			ns
Typical junction capacitance (Note2)	C <sub>J</sub>	50.0							pF
Typical thermal resistance	R <sub>qJA</sub>	80.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150							°C

**Note:** 1.Reverse recovery time test condition: I<sub>F</sub>=0.5A I<sub>R</sub>=1.0A I<sub>rr</sub>=0.25A  
 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**Ratings And Characteristic Curves**
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**

**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**

**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**

**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**

**Suggested Pad Layout**


Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215