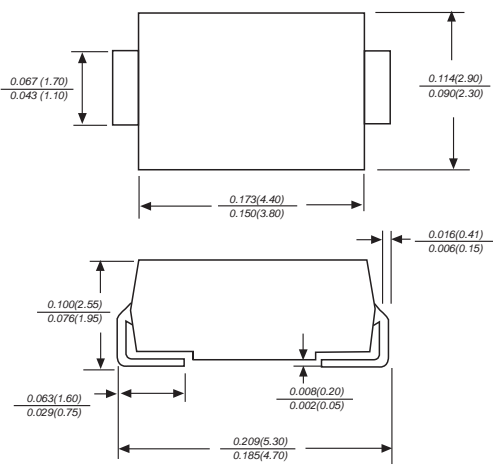


<b>SURFACE MOUNT ULTRA FAST RECTIFIER</b>	Reverse Voltage - 50 to 1000 Volts Forward Current -1.0 Ampere
<p><b><u>DO-214AC/SMA</u></b></p>  <p style="font-size: small;">Dimensions in inches and (millimeters)</p>	<p><b>Features</b></p> <ul style="list-style-type: none"> <li>➤ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0</li> <li>➤ Idea for printed circuit board</li> <li>➤ Glass passivated Junction chip</li> <li>➤ Low reverse leakage</li> <li>➤ High forward surge current capability</li> <li>➤ High temperature soldering guaranteed 250°C/10 seconds at terminals</li> </ul> <p><b>Mechanical Data</b></p> <p><b>Case :</b> Molded plastic body</p> <p><b>Terminals :</b> Solder plated, solderable per MIL-STD-750, Method 2026</p> <p><b>Polarity :</b> Polarity symbol marking on body</p> <p><b>Mounting Position :</b> Any</p> <p><b>Weight :</b> 0.0023 ounce, 0.07 grams</p>

### 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=""></sub(av)<>	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

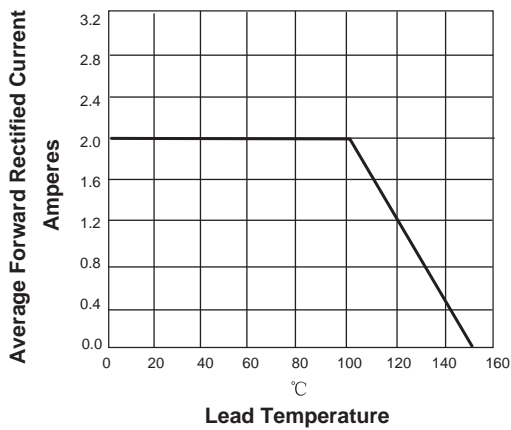


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

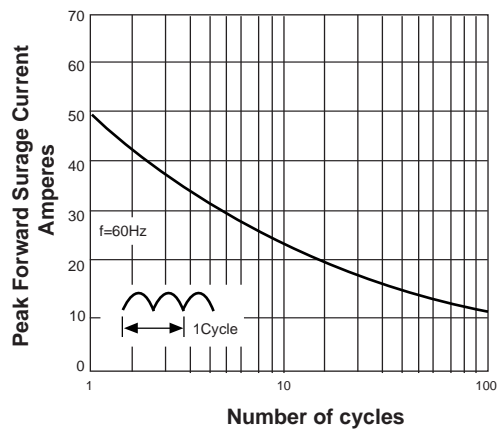


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

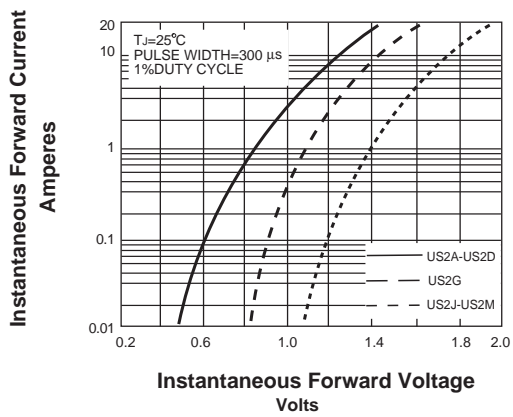


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

