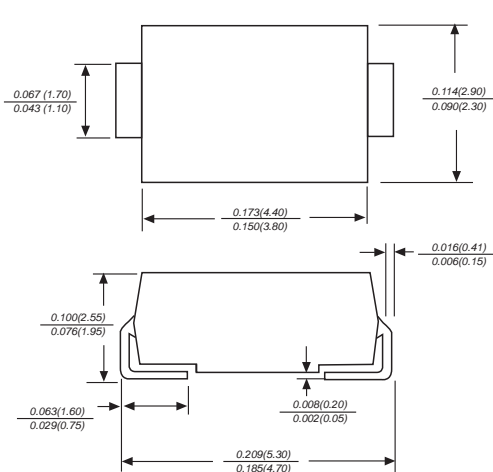
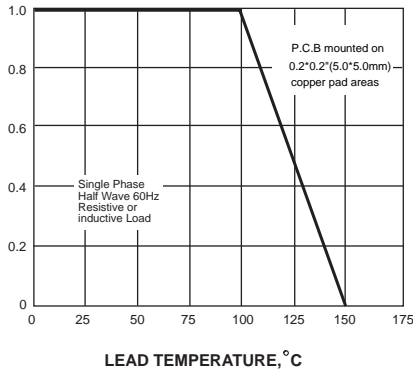


SURFACE MOUNT GENERAL RECTIFIER	Reverse Voltage - 50 to 1000 Volts Forward Current -1.0 Ampere																																																																																																														
<p style="text-align: center;">DO-214AC/SMA</p>  <p style="text-align: center; font-size: small;">Dimensions in inches and (millimeters)</p>	<p>Features</p> <ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Low reverse leakage ◆ Built-in strain relief, ideal for automated placement ◆ High forward surge current capability ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals <p>Mechanical Data</p> <p>Case: JEDEC DO-214AC molded plastic body Terminals: Solder plated, solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight: 0.002 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%.																																																																																																															
	<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th></th> <th>SYMBOLS</th> <th>M1</th> <th>M2</th> <th>M3</th> <th>M4</th> <th>M5</th> <th>M6</th> <th>M7</th> <th>UNITS</th> </tr> </thead> <tbody> <tr> <td>Maximum repetitive peak reverse voltage</td> <td>V_{RRM}</td> <td>50</td> <td>100</td> <td>200</td> <td>400</td> <td>600</td> <td>800</td> <td>1000</td> <td>V</td> </tr> <tr> <td>Maximum RMS voltage</td> <td>V_{RMS}</td> <td>35</td> <td>70</td> <td>140</td> <td>280</td> <td>420</td> <td>560</td> <td>700</td> <td>V</td> </tr> <tr> <td>Maximum DC blocking voltage</td> <td>V_{DC}</td> <td>50</td> <td>100</td> <td>200</td> <td>400</td> <td>600</td> <td>800</td> <td>1000</td> <td>V</td> </tr> <tr> <td>Maximum average forward rectified current at $T_L=100^\circ\text{C}$</td> <td>$I_{(AV)}$</td> <td colspan="7" style="text-align: center;">1.0</td> <td>A</td> </tr> <tr> <td>Peak forward surge current 8.3ms single half sine-wave superimposed on rated load</td> <td>I_{FSM}</td> <td colspan="7" style="text-align: center;">30.0</td> <td>A</td> </tr> <tr> <td>Maximum instantaneous forward voltage at 1.0A</td> <td>V_F</td> <td colspan="7" style="text-align: center;">1.1</td> <td>V</td> </tr> <tr> <td>Maximum DC reverse current at rated DC blocking voltage</td> <td>I_R</td> <td colspan="7" style="text-align: center;">5.0 50.0</td> <td>μA</td> </tr> <tr> <td>Typical junction capacitance (NOTE 1)</td> <td>C_J</td> <td colspan="7" style="text-align: center;">15.0</td> <td>pF</td> </tr> <tr> <td>Typical thermal resistance (NOTE 2)</td> <td>$R_{\theta JA}$</td> <td colspan="7" style="text-align: center;">75.0</td> <td>$^\circ\text{C}/\text{W}$</td> </tr> <tr> <td>Operating junction and storage temperature range</td> <td>T_J, T_{STG}</td> <td colspan="7" style="text-align: center;">-55 to +150</td> <td>$^\circ\text{C}$</td> </tr> </tbody> </table>		SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNITS	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 $T_L=100^\circ\text{C}$	$I_{(AV)}$	1.0							A	Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A	Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V	Maximum DC reverse current at rated DC blocking voltage	I_R	5.0 50.0							μA	Typical junction capacitance (NOTE 1)	C_J	15.0							pF	Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							$^\circ\text{C}/\text{W}$	Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$
	SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNITS																																																																																																						
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<p>Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas</p>																																																																																																															

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

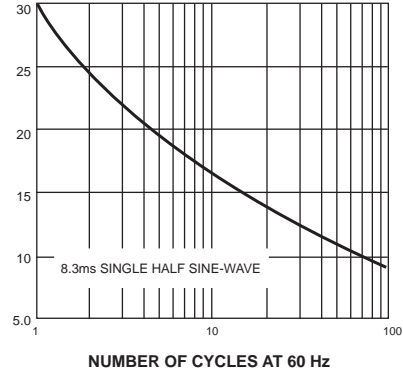
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



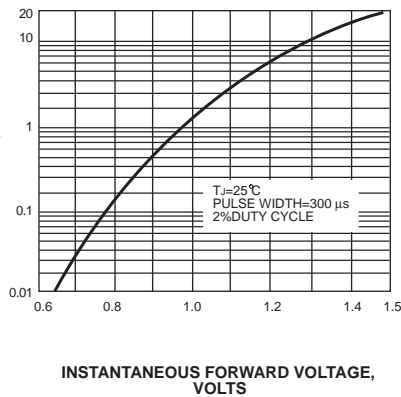
PEAK FORWARD SURGE CURRENT, AMPERES

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



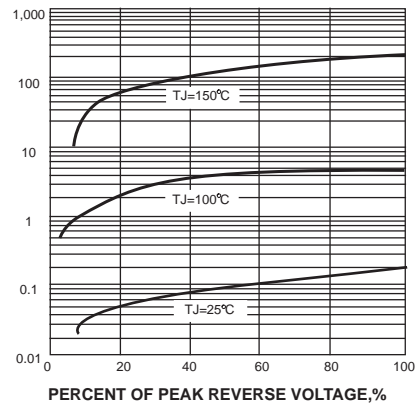
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



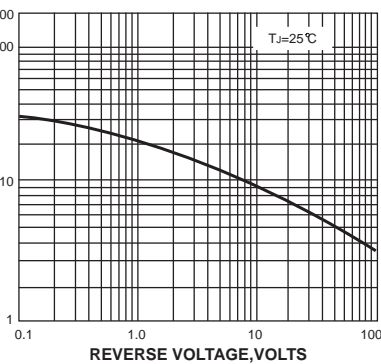
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

