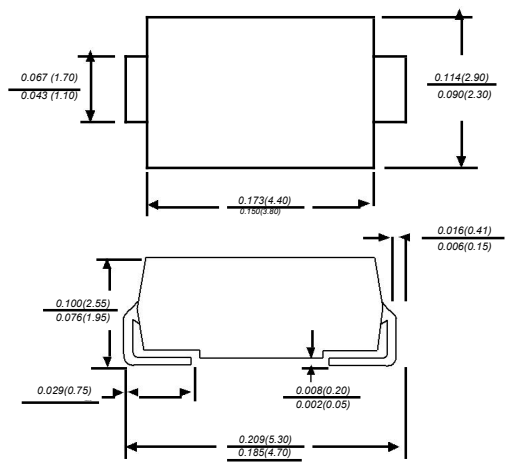


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER	Reverse Voltage - 20 to 200 Volts Forward Current -5.0 Ampere																																																																																																												
<p style="text-align: center;">DO-214AC/SMA</p>  <p style="text-align: center; font-size: 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 ▶ Built-in strain relief, ideal for automated placement ▶ Low reverse leakage ▶ High forward surge current capability ▶ High temperature soldering guaranteed 250°C/10 seconds at terminals <p>Mechanical Data</p> <p>Case : Molded plastic body Terminals : Solder plated, solderable per MIL-STD-750, Method 2026</p> <p>Polarity : Polarity symbol marking on body</p> <p>Mounting Position : Any Weight : 0.0023 ounce, 0.07 grams</p>																																																																																																												
<p>Maximum Ratings And Electrical Characteristics</p> <hr/> <p>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%.</p>																																																																																																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th style="text-align: center;">SYMBOLS</th> <th style="text-align: center;">SS52</th> <th style="text-align: center;">SS54</th> <th style="text-align: center;">SS56</th> <th style="text-align: center;">SS58</th> <th style="text-align: center;">SS510</th> <th style="text-align: center;">SS515</th> <th style="text-align: center;">SS520</th> <th style="text-align: center;">UNITS</th> </tr> </thead> <tbody> <tr> <td>Maximum repetitive peak reverse voltage</td> <td style="text-align: center;">V_{RRM}</td> <td style="text-align: center;">20</td> <td style="text-align: center;">40</td> <td style="text-align: center;">60</td> <td style="text-align: center;">80</td> <td style="text-align: center;">100</td> <td style="text-align: center;">150</td> <td style="text-align: center;">200</td> <td style="text-align: center;">V</td> </tr> <tr> <td>Maximum RMS voltage</td> <td style="text-align: center;">V_{RMS}</td> <td style="text-align: center;">14</td> <td style="text-align: center;">28</td> <td style="text-align: center;">42</td> <td style="text-align: center;">56</td> <td style="text-align: center;">70</td> <td style="text-align: center;">105</td> <td style="text-align: center;">140</td> <td style="text-align: center;">V</td> </tr> <tr> <td>Maximum DC blocking voltage</td> <td style="text-align: center;">V_{DC}</td> <td style="text-align: center;">20</td> <td style="text-align: center;">40</td> <td style="text-align: center;">60</td> <td style="text-align: center;">80</td> <td style="text-align: center;">100</td> <td style="text-align: center;">150</td> <td style="text-align: center;">200</td> <td style="text-align: center;">V</td> </tr> <tr> <td>Maximum average forward rectified current at $T_L = 100^\circ C$</td> <td style="text-align: center;">$I_{(AV)}$</td> <td colspan="7" style="text-align: center;">5.0</td> <td style="text-align: center;">A</td> </tr> <tr> <td>Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load</td> <td style="text-align: center;">I_{FSM}</td> <td colspan="7" style="text-align: center;">120.0</td> <td style="text-align: center;">A</td> </tr> <tr> <td>Maximum instantaneous forward voltage at 5.0A</td> <td style="text-align: center;">V_F</td> <td style="text-align: center;">0.55</td> <td style="text-align: center;">0.70</td> <td colspan="2" style="text-align: center;">0.85</td> <td colspan="2" style="text-align: center;">0.95</td> <td style="text-align: center;">V</td> </tr> <tr> <td>Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$</td> <td style="text-align: center;">I_R</td> <td colspan="2" style="text-align: center;">0.5</td> <td colspan="2" style="text-align: center;">0.05</td> <td colspan="2" style="text-align: center;">10</td> <td style="text-align: center;">mA</td> </tr> <tr> <td>Typical thermal resistance</td> <td style="text-align: center;">R_{QJA}</td> <td colspan="7" style="text-align: center;">80.0</td> <td style="text-align: center;">°C/W</td> </tr> <tr> <td>Operating junction temperature range</td> <td style="text-align: center;">T_J</td> <td colspan="7" style="text-align: center;">-55 to +150</td> <td style="text-align: center;">°C</td> </tr> <tr> <td>Storage temperature range</td> <td style="text-align: center;">T_{STG}</td> <td colspan="7" style="text-align: center;">-55 to +150</td> <td style="text-align: center;">°C</td> </tr> </tbody> </table>	Parameter	SYMBOLS	SS52	SS54	SS56	SS58	SS510	SS515	SS520	UNITS	Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V	Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V	Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V	Maximum average forward rectified current at $T_L = 100^\circ C$	$I_{(AV)}$	5.0							A	Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120.0							A	Maximum instantaneous forward voltage at 5.0A	V_F	0.55	0.70	0.85		0.95		V	Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R	0.5		0.05		10		mA	Typical thermal resistance	R_{QJA}	80.0							°C/W	Operating junction temperature range	T_J	-55 to +150							°C	Storage temperature range	T_{STG}	-55 to +150							°C	
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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

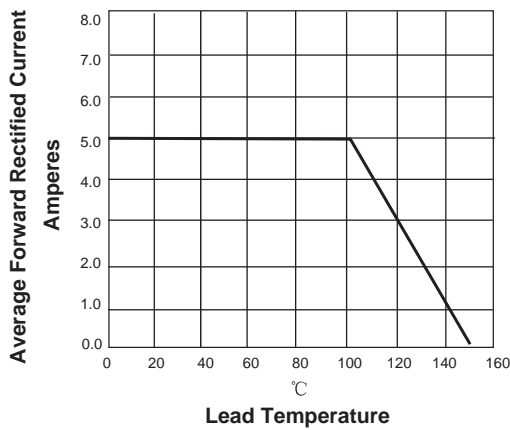


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

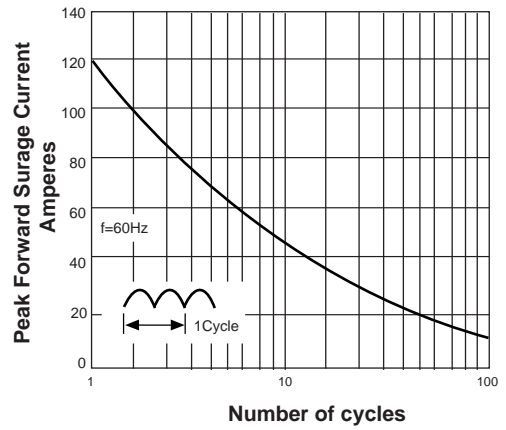


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

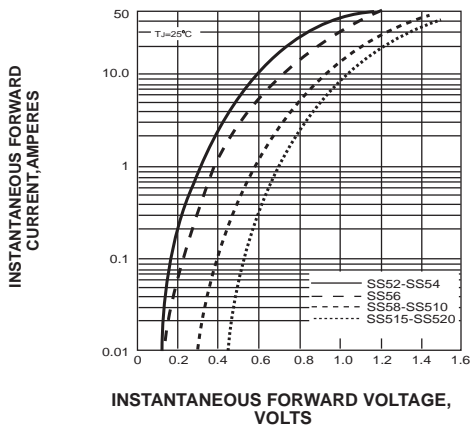


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

