

<p><b>SILICON PASSIVATED THREE PHASE BRIDGE RECTIFIERS</b></p> <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Diffused Junction</li> <li>● Low Forward Voltage Drop</li> <li>● High Current Capability</li> <li>● High Reliability</li> <li>● High Surge Current Capability</li> <li>● Ideal for Printed Circuit Boards</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>● Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation</li> <li>● Terminals: Plated Leads Solderable per MIL-STD-202, Method 208</li> <li>● Polarity: As Marked on Body</li> <li>● Weight: 20 grams (approx.)</li> <li>● Mounting Position: Bolt Down on Heatsink With Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency</li> <li>● Mounting Torque: 20 in lbs. Max.</li> <li>● Marking: Type Number</li> </ul>	<p style="text-align: center;"><b>REVERSE VOLTAGE - 50 to 1600 Volts</b></p> <p style="text-align: center;"><b>FORWARD CURRENT - 15 Amperes</b></p> <div style="text-align: center;"> <p><b>SBR</b></p> </div> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
---	--

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

**VOLTAGE RATINGS**

CHARACTERISTICS	SYMBOL	-00	-01	-02	-04	-06	-08	-10	-12	-14	-16	UNIT
Peak Repetitive Voltage	V <sub>RRM</sub>											V
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	1200	1400	1600	V
DC Blocking Voltage	V <sub>R</sub>											V
Peak Non_ Repetitive Reverse Voltage	V <sub>RSM</sub>	75	150	275	500	725	900	1100	1300	1500	1700	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	840	980	1120	V

**FORWARD CONDUCTION**

CHARACTERISTICS	SYMBOL	SBR15										UNIT
Maximum Average Forward Rectified Current @TC=100°C	I <sub>o</sub>	15										A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	300										A
Forward Voltage (per element) @T <sub>J</sub> =25°C, @IFM=40APK per single junction	V <sub>F</sub>	1.4										V
Peak Reverse Current (per leg) @T <sub>J</sub> =25°C	I <sub>R</sub>	10										uA
At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	5.0										mA
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500										V

**THERMAL CHARACTERISTICS**

Operating Temperature Range	T <sub>J</sub>	-55 to +150		°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150		°C
Thermal Resistance Junction to Case at DC Operation per Bridge	R <sub>θJC</sub>	1.6		K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	R <sub>θCS</sub>	0.2		K/W

FIG.1-MAXIMUM FORWARD SURGE CURRENT

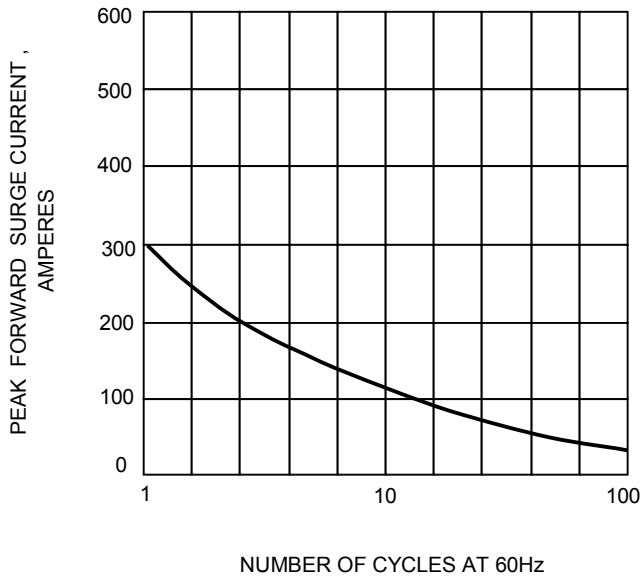


FIG.2- DERATING CURVE  
 OUTPUT RECTIFIED CURRENT

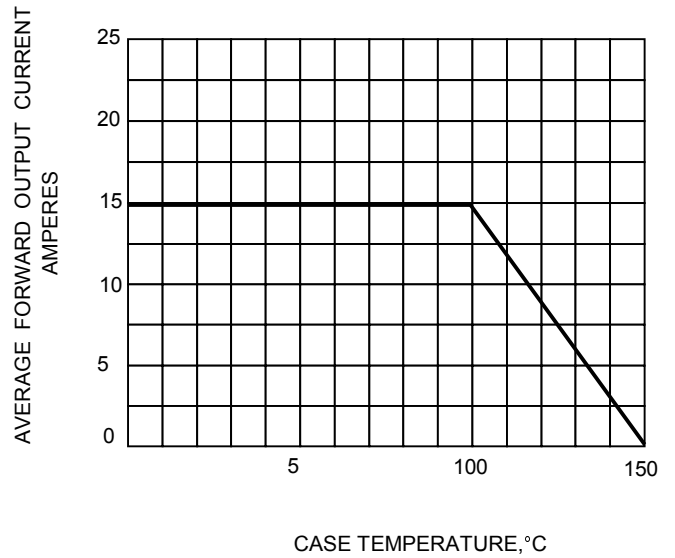


FIG.3-TYPICAL FORWARD CHARACTERISTICS

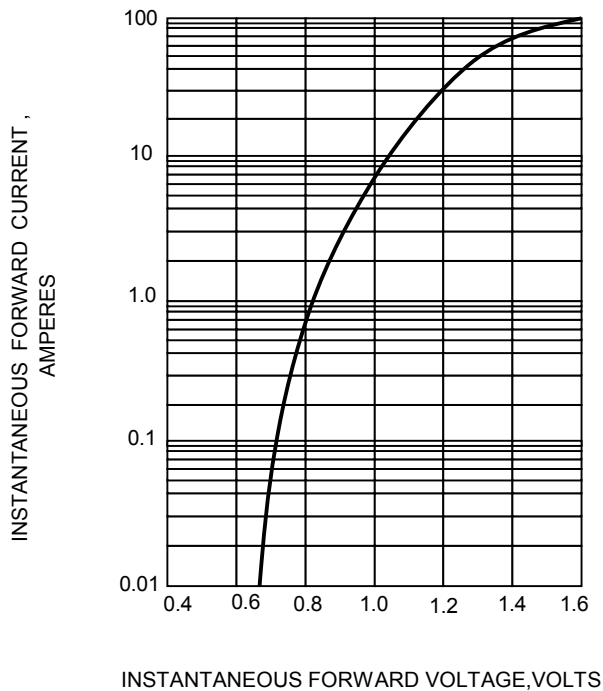


FIG.4-TYPICAL REVERSE CHARACTERISTICS

