

<p>SILICON PASSIVATED THREE PHASE BRIDGE RECTIFIERS</p> <p>FEATURES</p> <ul style="list-style-type: none"> ● Diffused Junction ● Low Forward Voltage Drop ● High Current Capability ● High Reliability ● High Surge Current Capability ● Ideal for Printed Circuit Boards <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation ● Terminals: Plated Leads Solderable per MIL-STD-202, Method 208 ● Polarity: As Marked on Body ● Weight: 20 grams (approx.) ● Mounting Position: Bolt Down on Heatsink With Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency ● Mounting Torque: 20 in lbs. Max. ● Marking: Type Number 	<p style="text-align: center;">REVERSE VOLTAGE - 50 to 1600 Volts</p> <p style="text-align: center;">FORWARD CURRENT - 15 Amperes</p> <div style="text-align: center;"> <p>SBR</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 _{RRM}											V
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	1200	1400	1600	V
DC Blocking Voltage	V _R											
Peak Non_ Repetitive Reverse Voltage	V _{RSM}	75	150	275	500	725	900	1100	1300	1500	1700	V
RMS Reverse Voltage	V _{R(RMS)}	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 _o	15										A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I _{FSM}	300										A
Forward Voltage (per element) @T _J =25°C, @IFM=40APK per single junction	V _F	1.4										V
Peak Reverse Current (per leg) @T _J =25°C	I _R	10										uA
At Rated DC Blocking Voltage @T _J =125°C	I _R	5.0										mA
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500										V

THERMAL CHARACTERISTICS				
Operating Temperature Range	T _J	-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150		°C
Thermal Resistance Junction to Case at DC Operation per Bridge	R _{θJC}	1.6		K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	R _{θCS}	0.2		K/W

FIG.1-MAXIMUM FORWARD SURGE CURRENT

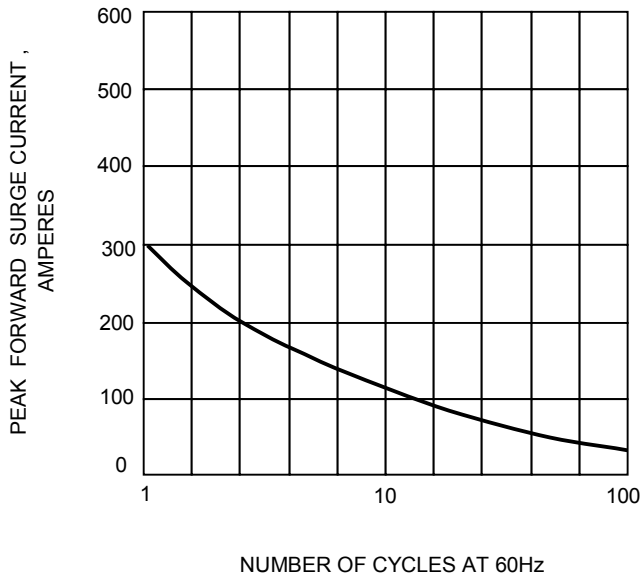


FIG.2- DERATING CURVE
 OUTPUT RECTIFIED CURRENT

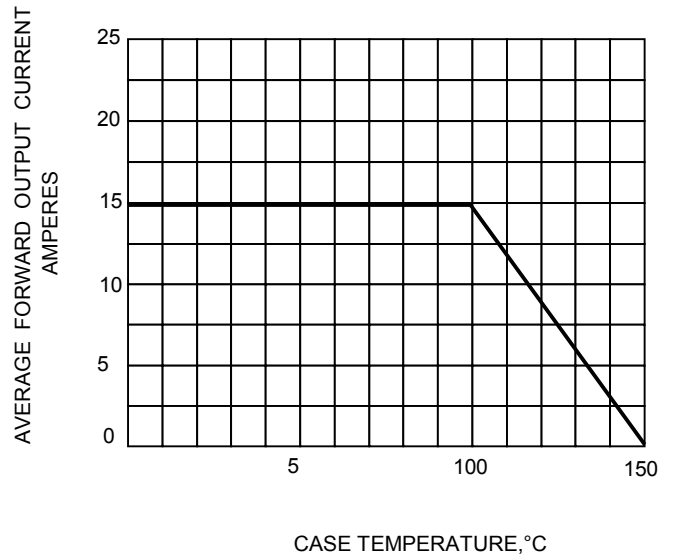


FIG.3-TYPICAL FORWARD CHARACTERISTICS

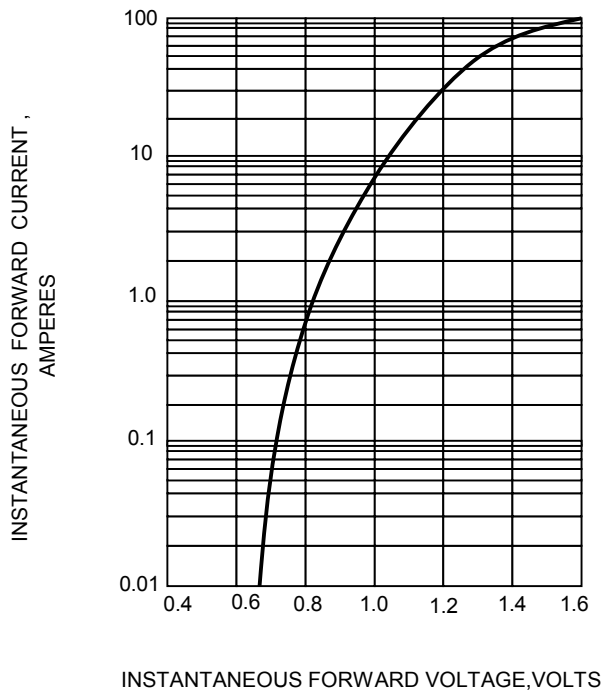


FIG.4-TYPICAL REVERSE CHARACTERISTICS

