

<b>SILICON PASSIVATED THREE PHASE BRIDGE RECTIFIERS</b>	<b>REVERSE VOLTAGE - 50 to 1600 Volts</b> <b>FORWARD CURRENT - 15/25/35 Amperes</b>
<b>FEATURES</b> <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> <b>MECHANICAL DATA</b> <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;">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%

CHARACTERISTICS	SYMBOL	-00	-01	-02	-04	-06	-08	-10	-12	-14	-16	UNIT
Peak Repetitive Voltage	VRRM											V
Working Peak Reverse Voltage	VRWM	50	100	200	400	600	800	1000	1200	1400	1600	V
DC Blocking Voltage	VR											V
Peak Non-Repetitive Reverse Voltage	VRSM	75	150	275	500	725	900	1100	1300	1500	1700	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V

CHARACTERISTICS	SYMBOL	SBR25	SBR35	UNIT
Maximum Average Forward Rectified Current @ TC=100°C	Io	25	35	A
Non-Repetitive Peak Forward Surge Current (No Voltage Reapplied t=8.3ms at 60HZ)	IFSM	375	500	A
(No Voltage Reapplied t=10ms at 50HZ)		360	475	
(100% VRRM Reapplied t=8.3ms at 60HZ)		314	420	
(100% VRRM Reapplied t=10ms at 50HZ)		300	400	
I2t Rating for fusing (No Voltage Reapplied t=8.3ms at 60HZ)	I <sup>2</sup> t	580	1030	A <sup>2</sup> S
(No Voltage Reapplied t=10ms at 50HZ)		635	1130	
(100% VRRM Reapplied t=8.3ms at 60HZ)		410	730	
(100% VRRM Reapplied t=10ms at 50HZ)		450	800	
Forward Voltage (per element) @ TJ=25°C, @ IFM=40APK per single junction	VF	1.26	1.19	V
Peak Reverse Current (per leg) @ TJ=25°C	IR	10		uA
At Rated DC Blocking Voltage @ TJ=125°C		5.0		mA
RMS Isolation Voltage from Case to Lead	VISO	2500		V

THERMAL CHARACTERISTICS				
Operating Temperature Range	TJ	-55 to +150		°C
Storage Temperature Range	TSTG	-55 to +150		°C
Thermal Resistance Junction to Case at DC Operation per Bridge	RθJC	1.42	1.16	K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	RθCS	0.2		K/W

FIG.1-CURRENT RATING CHARACTERISTICS

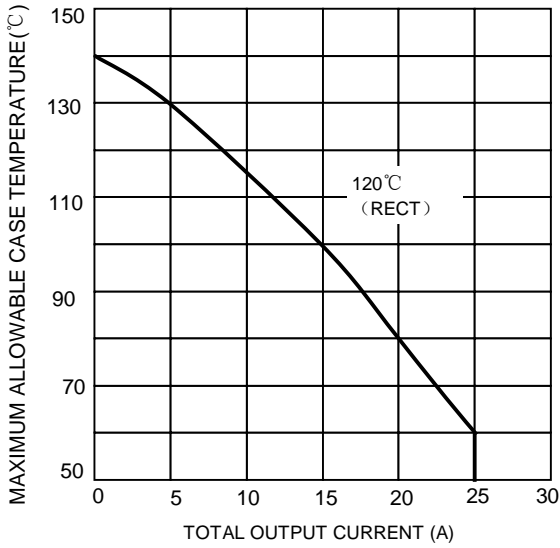


FIG.2-FORWARD VOLTAGE DROP CHARACTERISTICS

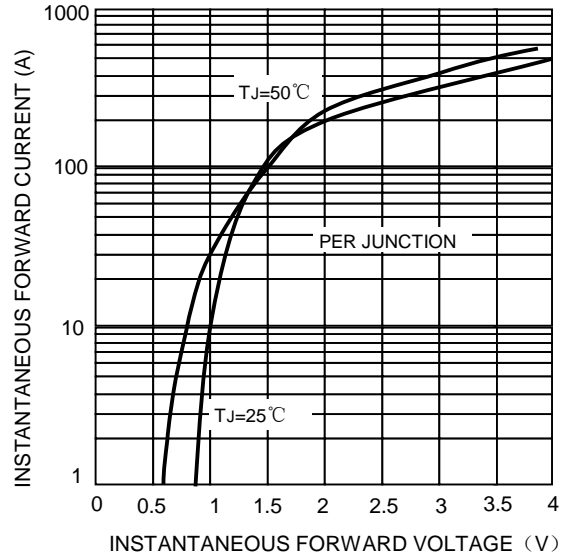


FIG.3-TOTAL POWER LOSS CHARACTERISTICS

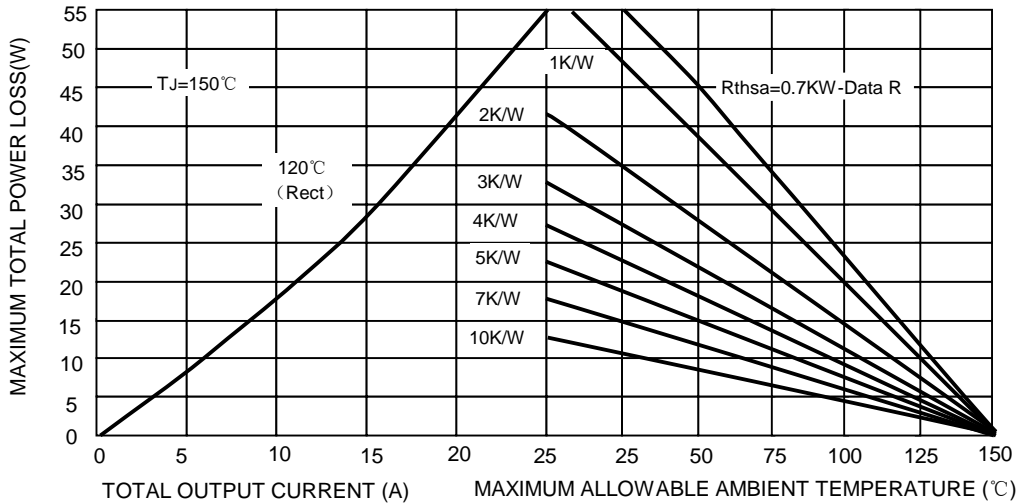


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

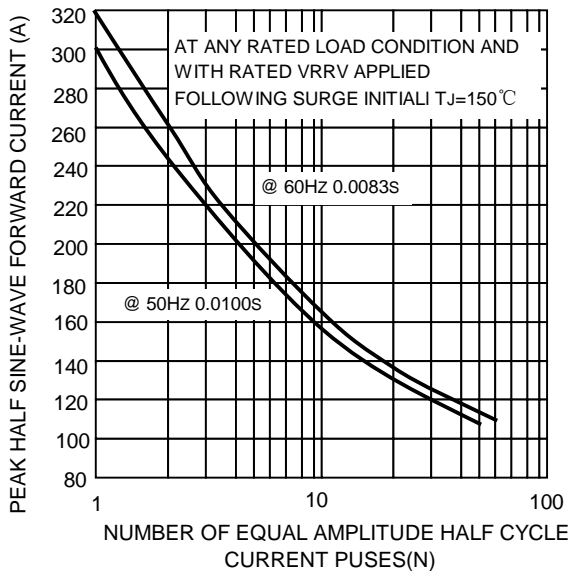
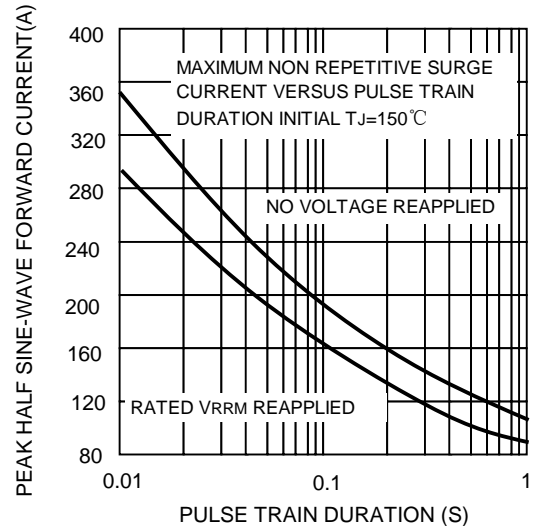


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT



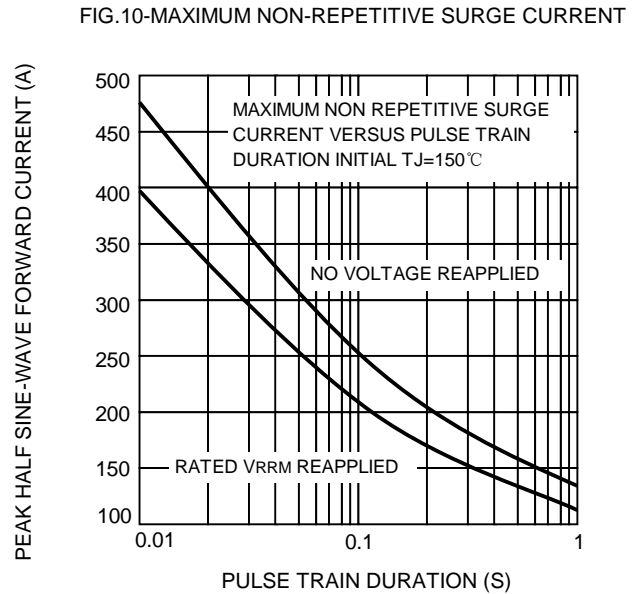
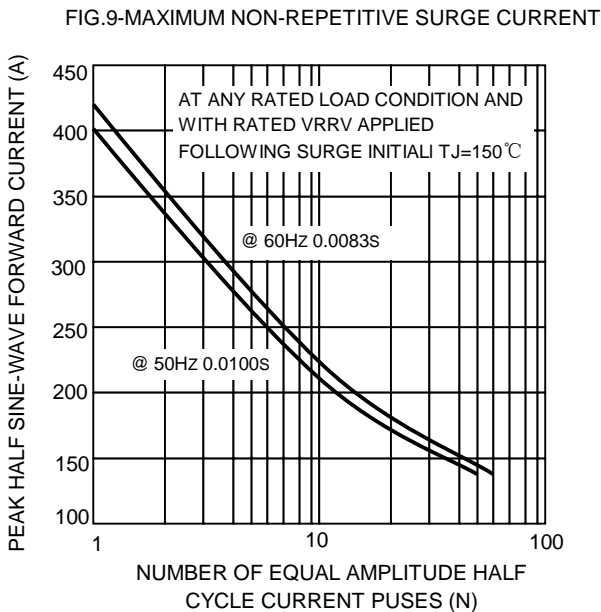
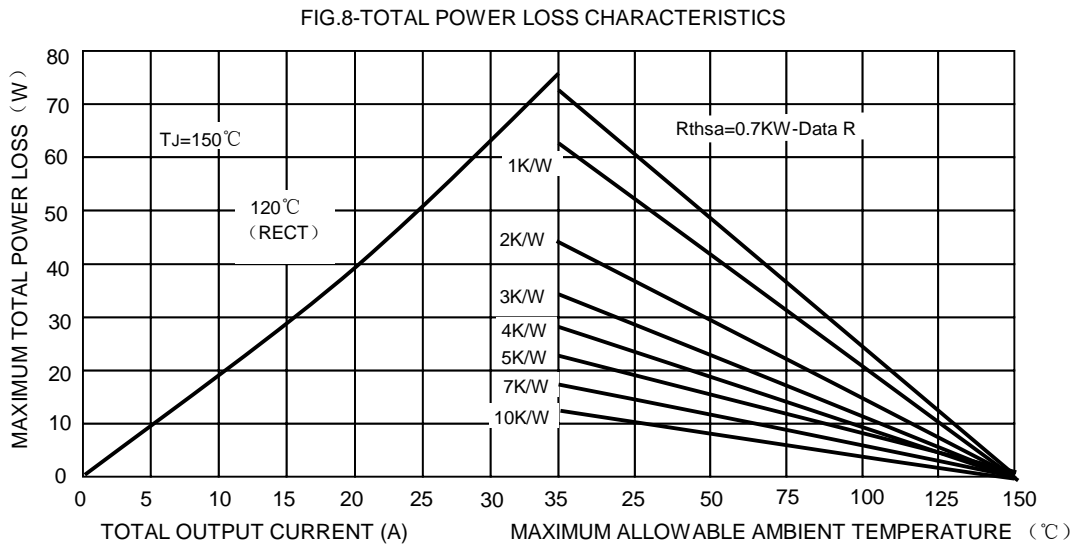
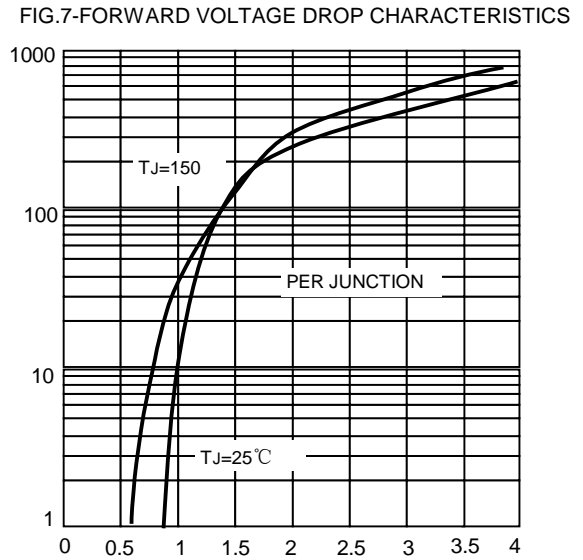
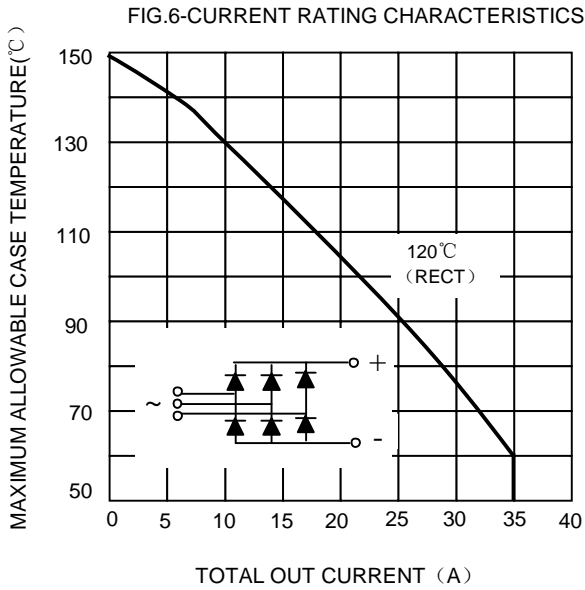


FIG.11-THERMAL IMPEDANCE  $Z_{ThJC}$  CHARACTERISTICS

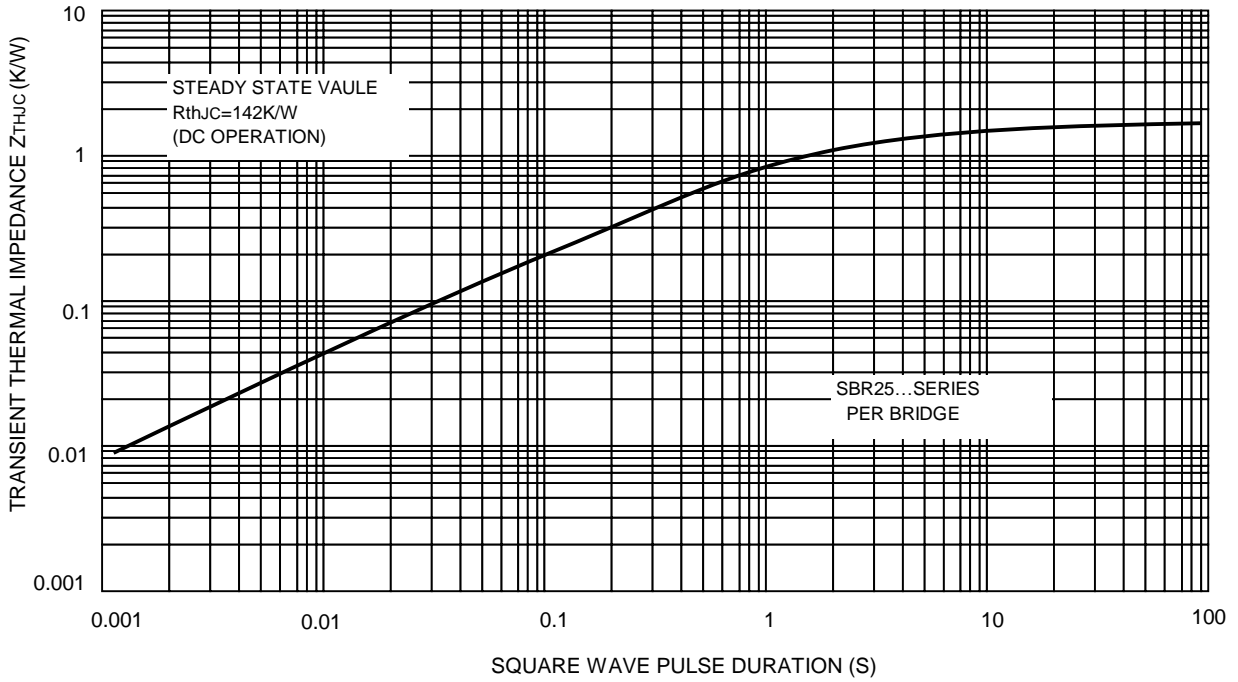


FIG.12-THERMAL IMPEDANCE  $Z_{ThJC}$  CHARACTERISTICS

