

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

CHARACTERISTICS	SYMBOL	SBR25		SBR35		UNIT
Maximum Average Forward Rectified Current @TC=100°C	I _o	25		35		A
Non-Repetitive Peak Forward Surge Current (No Voltage Reapplied t=8.3ms at 60HZ)	I _{FSM}	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		
I ² t Rating for fusing (No Voltage Reapplied t=8.3ms at 60HZ)	I ² t	580		1030		A ² 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) @T _J =25°C, @IFM=40APK per single junction	V _F	1.26		1.19		V
Peak Reverse Current (per leg) @T _J =25°C	I _R	10				μA
At Rated DC Blocking Voltage @T _J =125°C		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}	1.42		1.16		K/W
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	R _{θCS}	0.2				K/W

FIG.1-CURRENT RATING CHARACTERISTICS

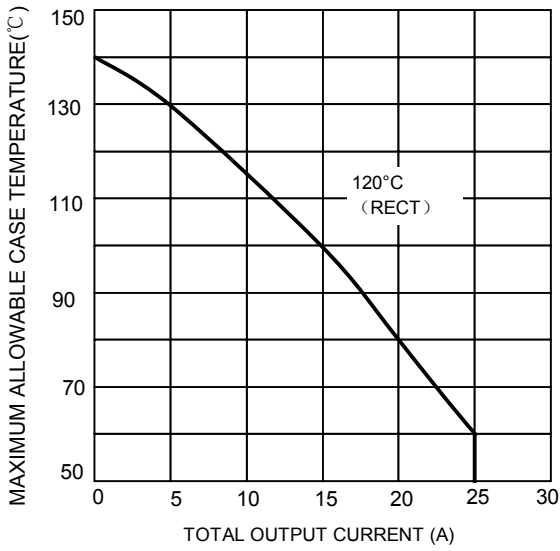


FIG.2-FORWARD VOLTAGE DROP CHARACTERISTICS

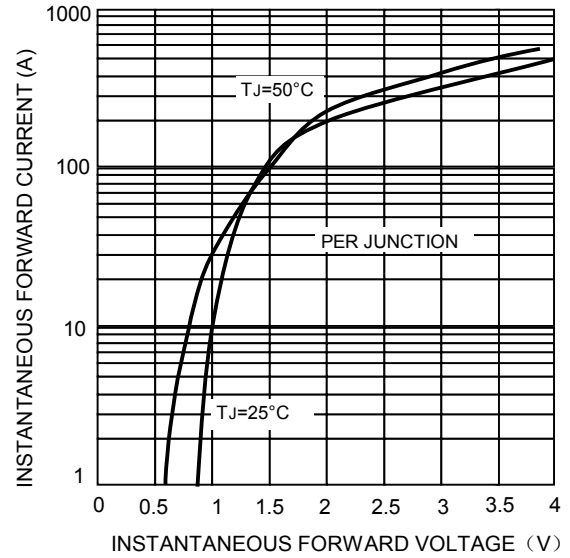


FIG.3-TOTAL POWER LOSS CHARACTERISTICS

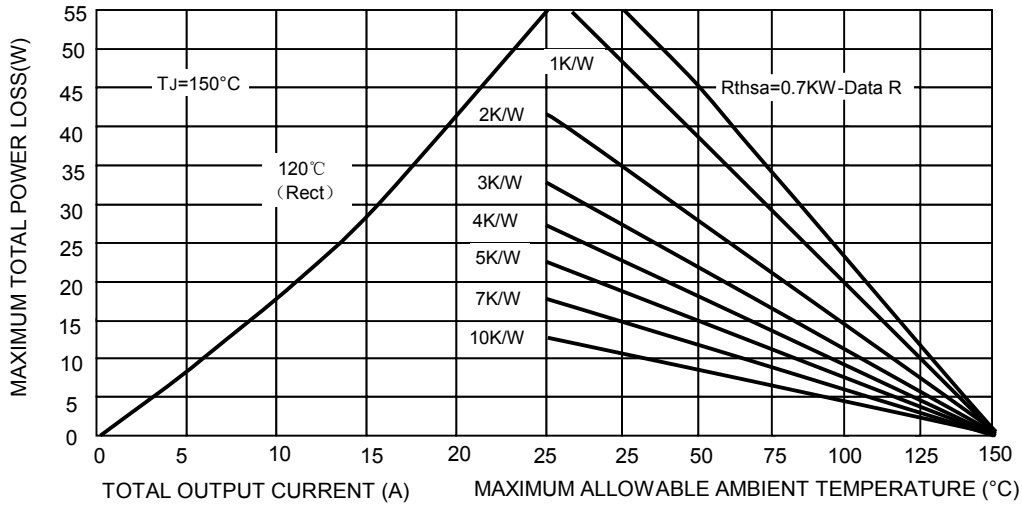


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

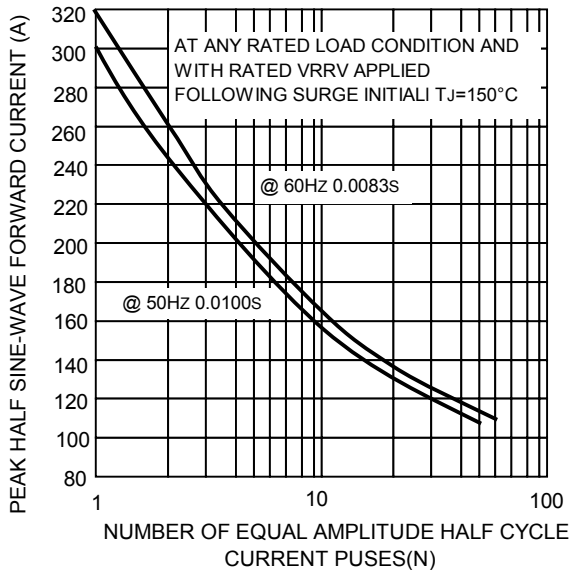
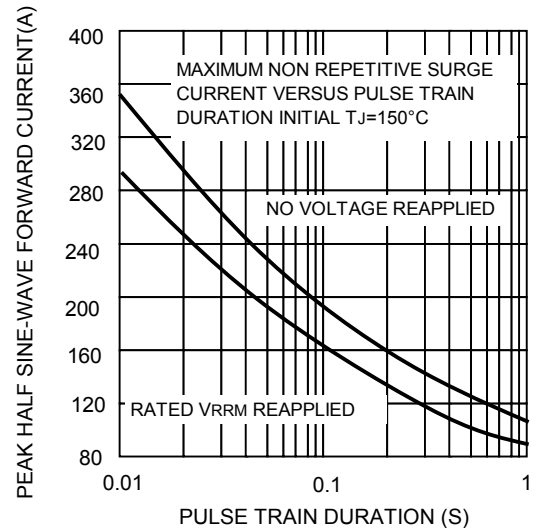


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT



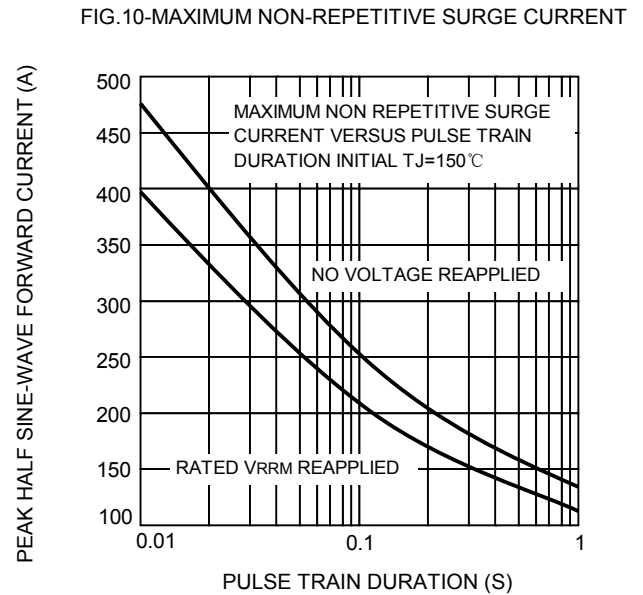
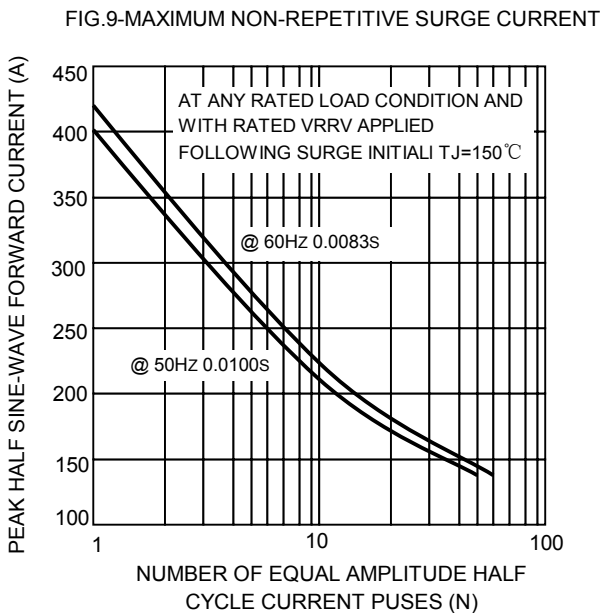
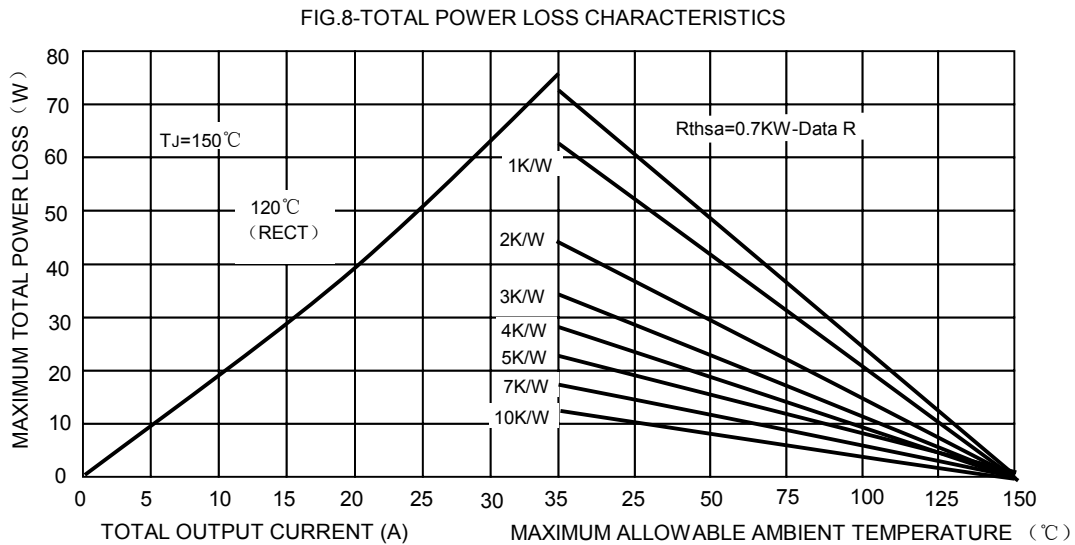
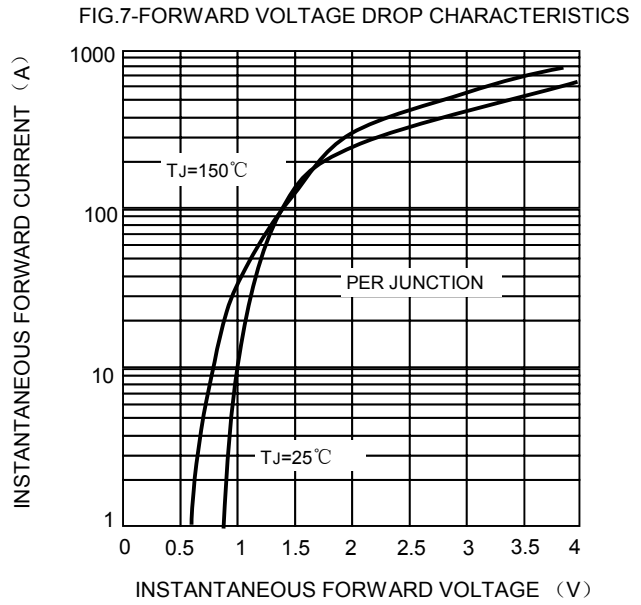
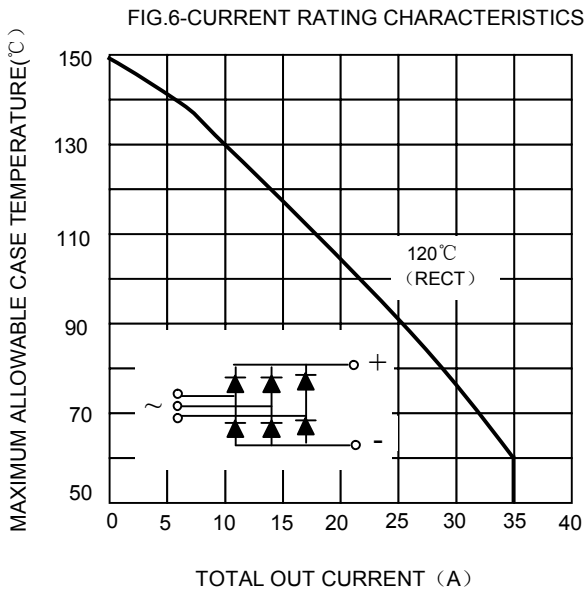


FIG.11-THERMAL IMPEDANCE Z_{THJC} CHARACTERISTICS

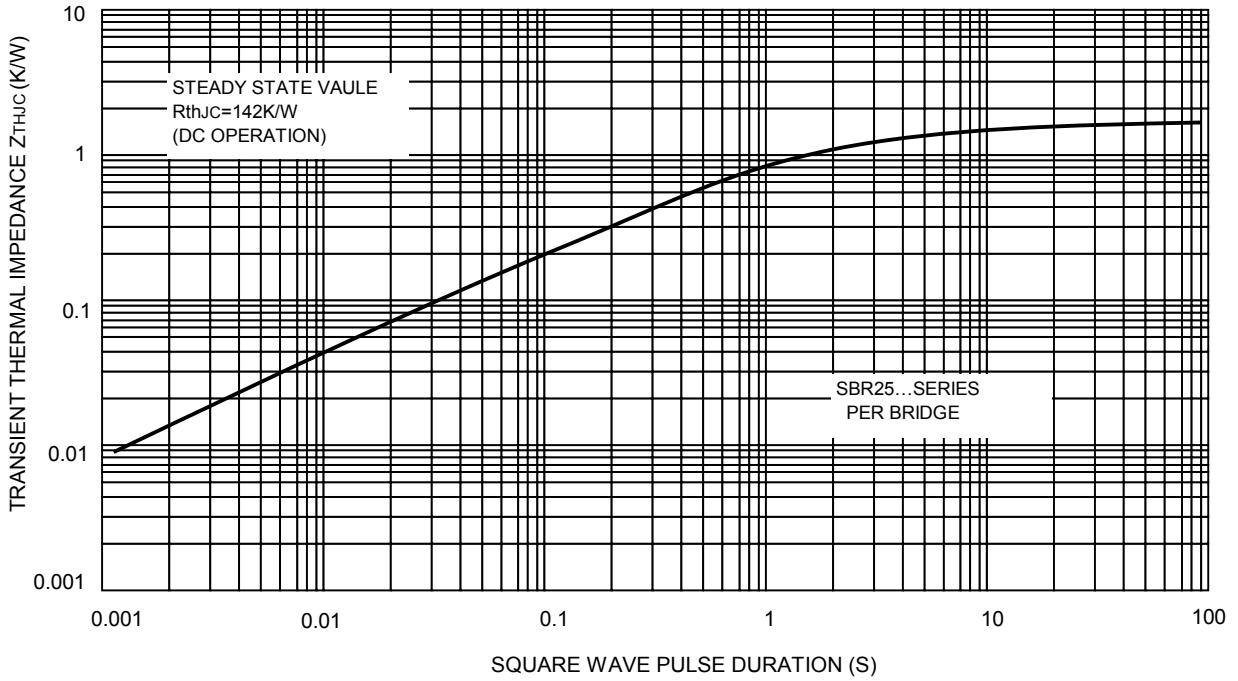


FIG.12-THERMAL IMPEDANCE Z_{THJC} CHARACTERISTICS

