



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**TBR1500
THRU
TBR1516**

TECHNICAL SPECIFICATIONS OF THREE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1600 Volts **CURRENT - 15 Amperes**

FEATURES

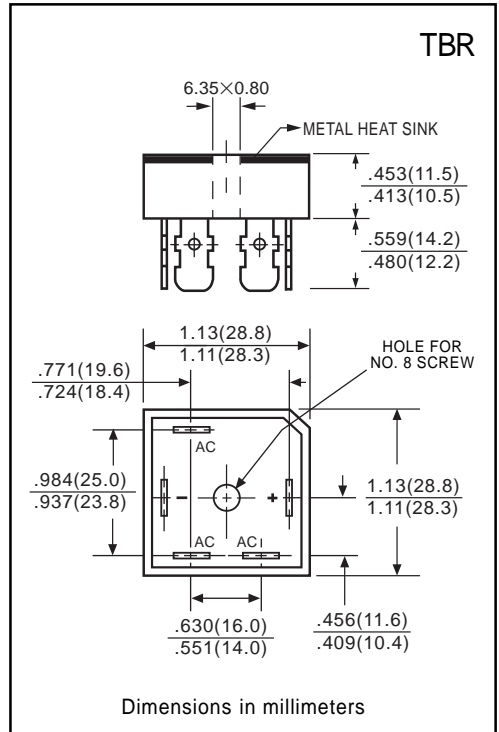
- * Diffused Junction
- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability
- * Ideal for Printed Circuit Boards

MECHANICAL DATA

- * Case: Molded plastic with heatsink
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Plated .25"(6.35mm) Faston lugs, Solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 20 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



		SYMBOL	TBR 1500	TBR 1501	TBR 1502	TBR 1504	TBR 1506	TBR 1508	TBR 1510	TBR 1512	TBR 1514	TBR 1516	UNITS
Maximum Recurrent Peak Reverse Voltage & DC Blocking Voltage		V _{RRM, VDC}	50	100	200	400	600	800	1000	1200	1400	1600	Volts
Maximum RMS Bridge Input Voltage		V _{RMS}	35	70	140	280	420	560	700	840	980	1120	Volts
Peak Non-Repetitive Reverse Voltage		V _{RSM}	75	150	275	500	725	900	1100	1300	1500	1700	Volts
Maximum Average Forward Rectified Output Current at T _c = 50°C		I _o	15										Amps
Non-Repetitive Peak Forward Surge Current	No Voltage Reapplied	t=8.3ms at 60Hz	375										Amps
		t=10ms at 50Hz	360										
	100% V _{RRM} Reapplied	t=8.3ms at 60Hz	314										
		t=10ms at 50Hz	300										
Forward Voltage(per element) @T _J =25°C, @I _{FM} =40A _{PK} per single junction		V _F	1.4										Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element		@T _J = 25°C	10										μAmps
		@T _J = 125°C	5.0										mAmps
I ² t Rating for Fusing		I ² t	580										A ² Sec
			635										
			410										
			450										
RMS Isolation Voltage from Case to Lead		V _{ISO}	2500										Volts
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased		R _{θCS}	0.2										K/W
Thermal Resistance Junction to Case at DC Operation per Bridge		R _{θJC}	1.6										K/W
Operating and Storage Temperature Range		T _{J, TSTG}	-40 to +150										°C

RATING AND CHARACTERISTIC CURVES (TBR1500 THRU TBR1516)

FIG. 1 - MAXIMUM NON-REPETITIVE SURGE CURRENT

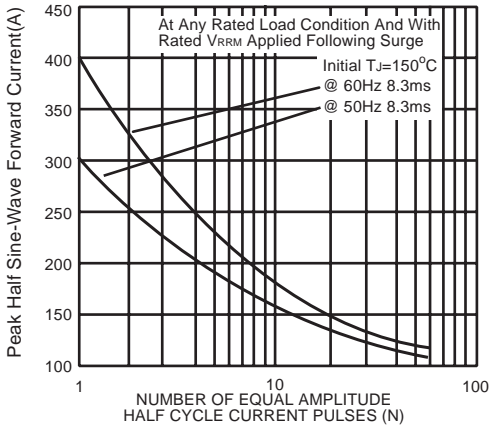


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

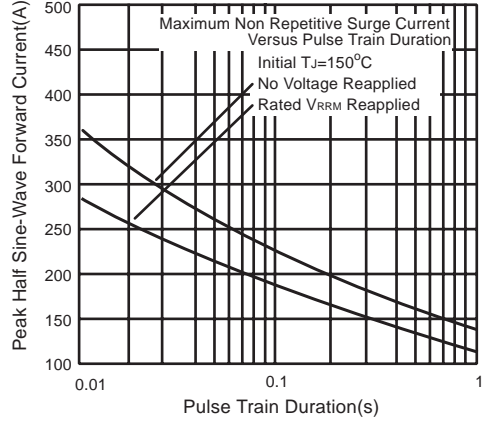


FIG. 3 - TOTAL POWER LOSS CHARACTERISTICS

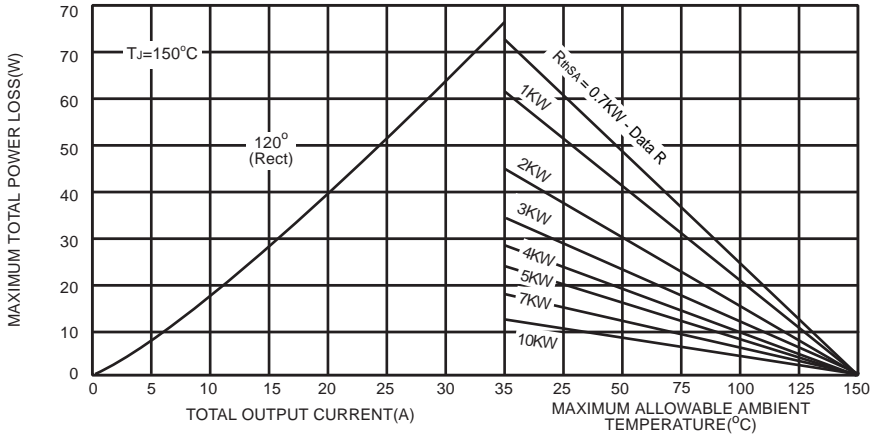


FIG. 4 - FORWARD VOLTAGE DROP CHARACTERISTICS

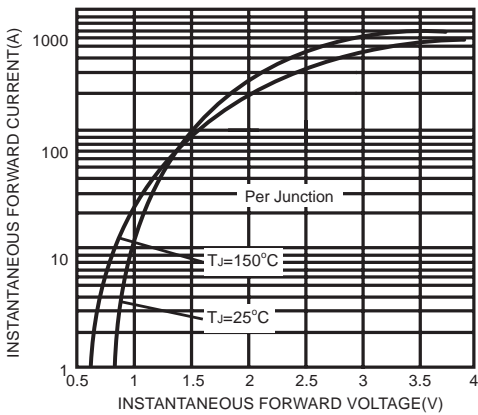
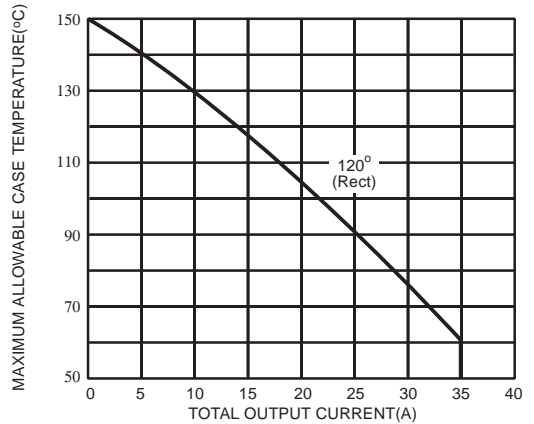


FIG. 5 - CURRENT RATINGS CHARACTERISTICS



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