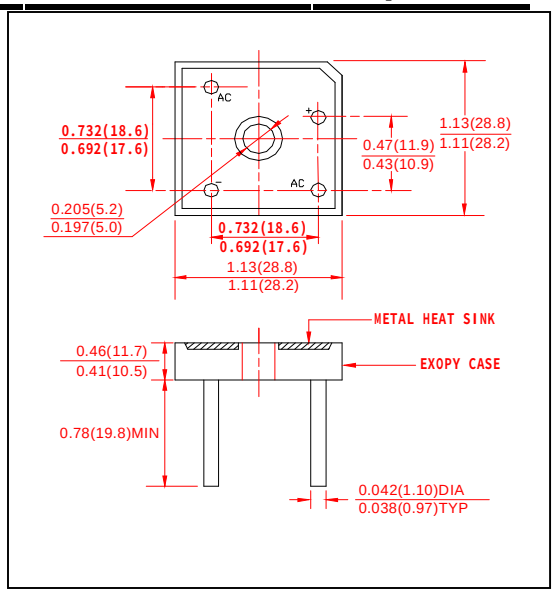
SINGLE PHASE BRIDGE RECTIFIER

FBPC25005WN THRU FBPC2510WN

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **25 Ampere**

FEATURES

- **Low cost**
- **This series is UL recognized under component index file number E127707**
- **High forward surge current capability**
- **Fast switching for high efficiency**
- **Integrally molded heatsink provide very low thermal resistance**
- **High isolation voltage from case to leads**
- **High temperature soldering guaranteed: 260℃ / 10 seconds,at 5 lbs. (2.3kg) tension.**



MECHANICAL DATA

- **Case: Molded plastic body**
- **Terminal: Plated 0.04″ (1.02mm)diameter**
- **Polarity: Polarity symbols marked on case**
- **Mounting: Thru hole for #10 screw, 20 in,-lbs Torque Max.**
- **Weight: 0.47 ounce, 13.4 gram**
- **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**
- **Ratings at 25^{O}C ambient temperature unless otherwise specified**
- **Single Phase, half wave, 60Hz, resistive or inductive load**
- **For capacitive load derate current by 20%**

	SYMBOL	FBPC 25005WN	FBPC 2501WN	FBPC 2502WN	FBPC 2504WN	FBPC 2506WN	FBPC 2508WN	FBPC 2510WN	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_C = 50℃ (Note 1,2)	$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps
Rating for Fusing (t<8.3mS)	I^2t	373							A^2s
Maximum Instantaneous Forward Voltage Drop per Bridge element at 12.5 A	V_F	1.2				1.3			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element T_A = 25 ℃	I_R	10							μA
Maximum DC Reverse Current at Rated DC Blocking Voltage per element T_A = 100 ℃	I_R	1.0							mA
Maximum DC Reverse recovery time(Note3)	T_{rr}	150				250	500		NS
Isolation Voltage from case to lead	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{\theta Jc}$	2.0							^{O}C/W
Operating Temperature Rang	T_J	(-65 to +150)							^{O}C
Storage Temperature Rang	T_{STG}	(-65 to +150)							^{O}C

Notes:

1. Unit mounted on 5” x 6” x 4.9” (12.8cm x15.2cm x 12.4cm) AL finned Plate
2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum beat transfer efficiency with #10 screw
3. Reverse recovery test conditions: I_F=0.5A,I_R=1.0A,I_{RR}=0.25A

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	CURRENT	**25 Ampere**

RATINGS AND CHARACTERISTIC CURVES FBR2505WN THRU FBR2510WN

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

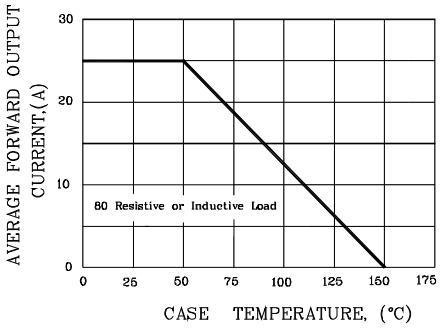

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

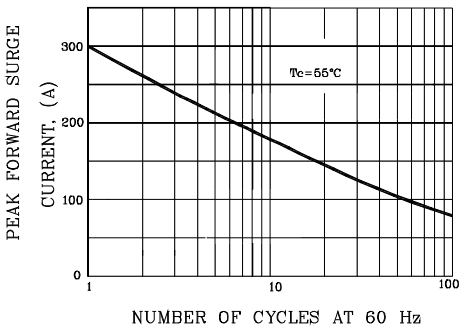

FIG.3-TYPICAL FORWARD CHARACTERISTICS PER DIODE

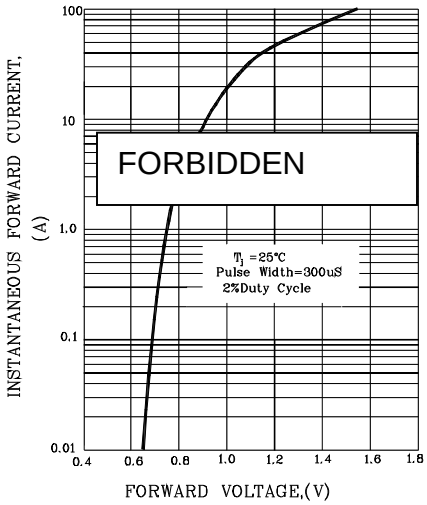

FIG.4-TYPICAL REVERSE CHARACTERISTICS PER DIODE

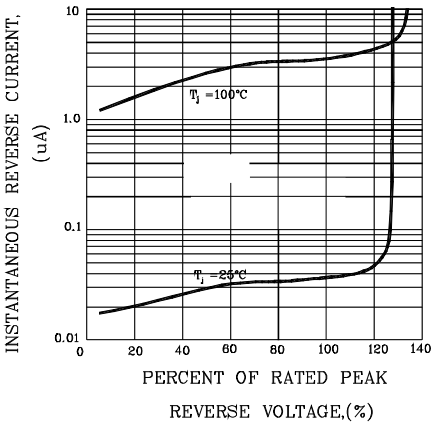

FIG.4-TYPICAL JUNCTION CAPACITANCE