



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

8A SILICON SINGLE-PHASE BRIDGE RECTIFIERS

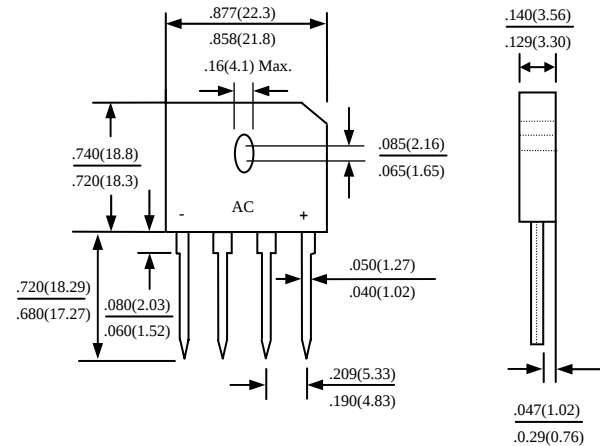
GBU8-005 THRU GBU8-10

FEATURES

- PLASTIC MATERIAL HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- IDEAL FOR PRINTED CIRCUIT BOARD
- HIGH TEMPERATURE SOLDERING GUARANTEED: 260°C / 10S
- 0.375" (9.5mm) LEAD LENGTH AT 5 LBS (2.3KG) TENSION
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- MOUNTING TORQUE: 5 IN-LB MAX
- MOUNTING POSITION: ANY
- WEIGHT: 4.0 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%

RATINGS	SYMBOL	GBU8-005	GBU8-01	GBU8-02	GBU8-04	GBU8-06	GBU8-08	GBU8-10	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	280	420	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED OUTPUT CURRENT (SEE FIG.1)	I_O	8.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	200							A
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150							°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 150							°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	GBU8-005	GBU8-01	GBU8-02	GBU8-04	GBU8-06	GBU8-08	GBU8-10	UNITS
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE DROP PER ELEMENT AT 4.0 A	V_F	1.0							V
MAXIMUM REVERSE LEAKAGE AT RATE DC BLOCKING VOLTAGE PER ELEMENT $T_A = 25^\circ\text{C}$, $T_C = 100^\circ\text{C}$	I_R	5							μA

RATINGS AND CHARACTERISTIC CURVES GBU8-005 THRU GBU8-10

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

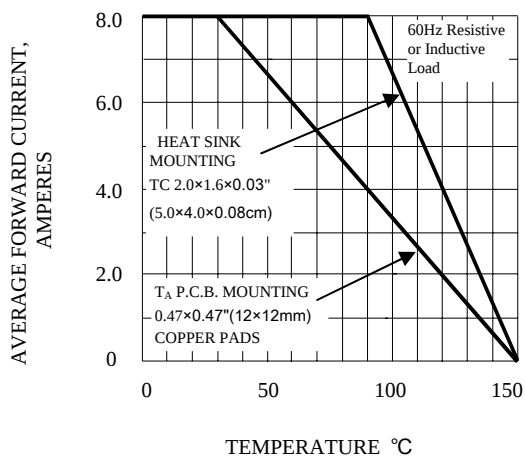


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

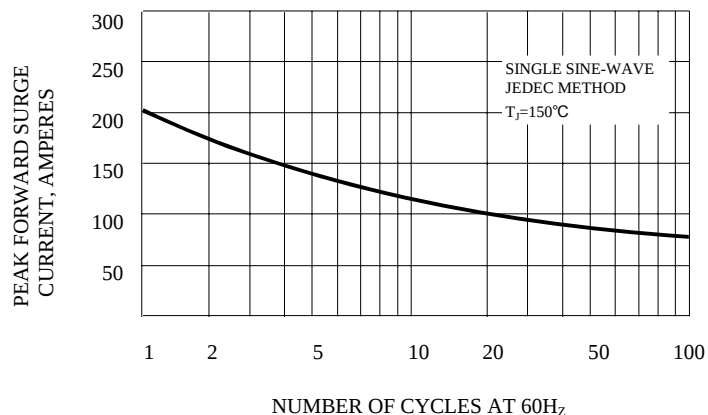


FIG. 3 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

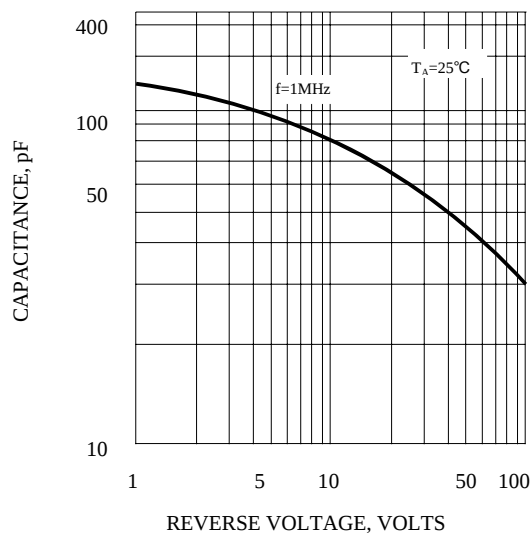


FIG. 4 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

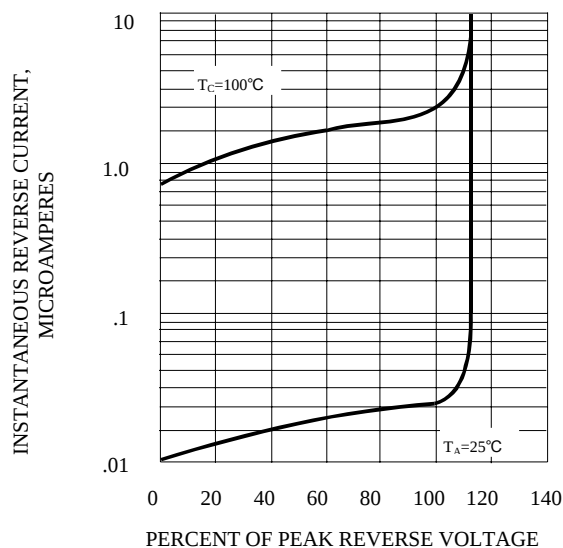


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

