



# Frontier Electronics Corp.

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## 6A SILICON SINGLE-PHASE BRIDGE RECTIFIERS

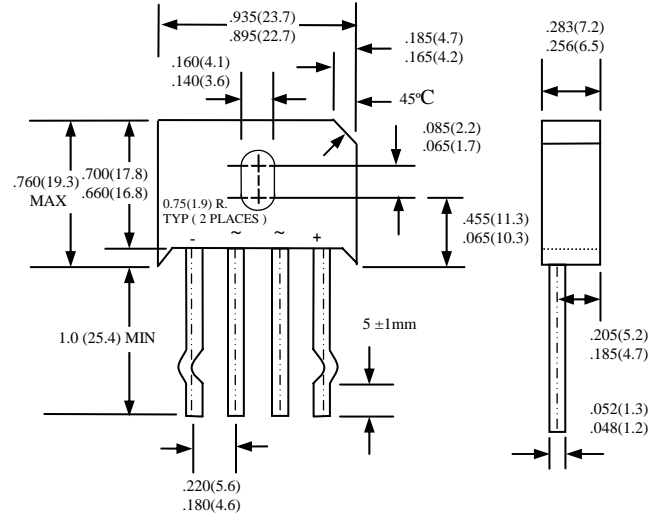
### BU6-005F THRU BU6-10F

#### 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

#### MECHANICAL DATA

- CASE: MOLDED PLASTIC, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- MOUNTING POSITION: ANY
- MOUNTING TORQUE: 5 IN-LB MAX
- WEIGHT: 8.0 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	BU6-005F	BU6-01F	BU6-02F	BU6-04F	BU6-06F	BU6-08F	BU6-10F	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)	$I_O$	6.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	250							A
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150							°C
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 150							°C

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

CHARACTERISTICS	SYMBOL	BU6-005F	BU6-01F	BU6-02F	BU6-04F	BU6-06F	BU6-08F	BU6-10F	UNITS
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE DROP PER ELEMENT AT $I_{FM}$	$V_F$	1.0							V
MAXIMUM REVERSE LEAKAGE AT RATED DC BLOCKING VOLTAGE PER ELEMENT $T_A = 25^\circ C$ , $T_C = 100^\circ C$	$I_R$	10							$\mu A$

# RATINGS AND CHARACTERISTIC CURVES BU6-005F THRU BU6-10F

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

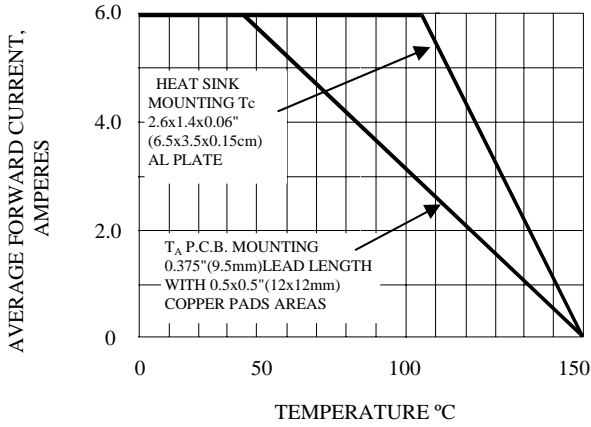


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

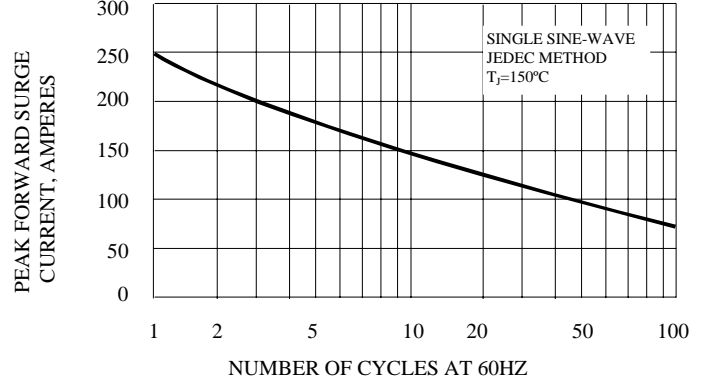


FIG. 3 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

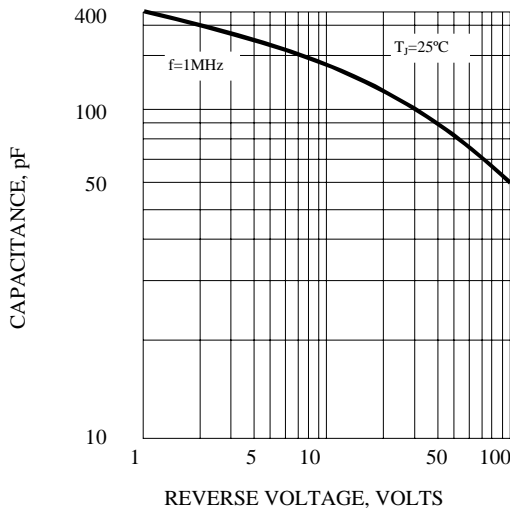


FIG. 4 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

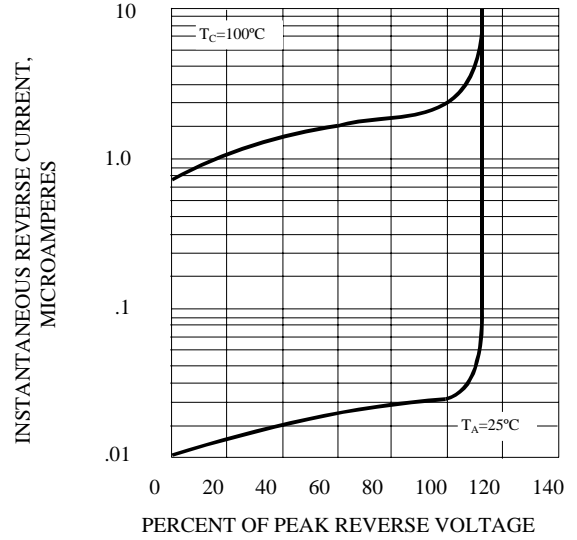


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

