



**FRONTIER  
ELECTRONICS CO., LTD.**

**BP50-005  
THRU  
BP50-10**

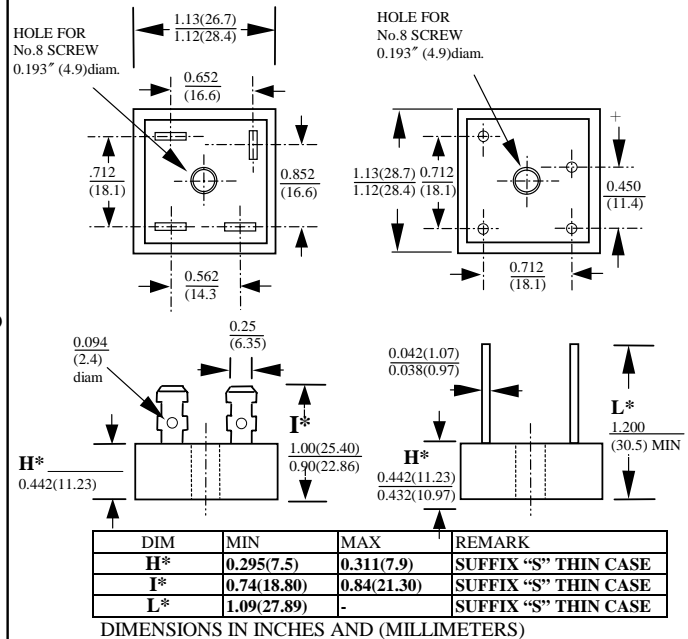
**50A HIGH CURRENT SILICON BRIDGE RECTIFIERS**

**FEATURES**

- CURRENT RATING 50A
- REVERSE VOLTAGE RATING UP TO 1000V
- TYPICAL IR LESS THAN 1μA
- HIGH TEMPERATURE SOLDERING GUARANTEED :  
260°C /10 SECOND

**MECHANICAL DATA**

- CASE : METAL HEAT SINK CASE,ELECTRICALLY INSULATED
- TERMINALS : UNIVERSAL .25" (6.3mm) FASTON
- MOUNTING METHOD : BOLT DOWN ON HEAT SINK WITH SILICON THERMAL COMPOUND BETWEEN BRIDGE AND MOUNTING SURFACE FOR MAXIMUM HEAT TRANSFER EFFICIENCY
- 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%

RATINGS	SYMBOL	BP50-005	BP50-01	BP50-02	BP50-04	BP50-06	BP50-08	BP50-10	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED OUTPUT CURRENT AT TC=55°C	I <sub>O</sub>	50.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	I <sub>FSM</sub>	550							A
STORAGE TEMPERATURE RANGE	T <sub>STG</sub>	- 55 TO + 175							°C
OPERATING TEMPERATURE RANGE	T <sub>OP</sub>	- 55 TO + 175							°C

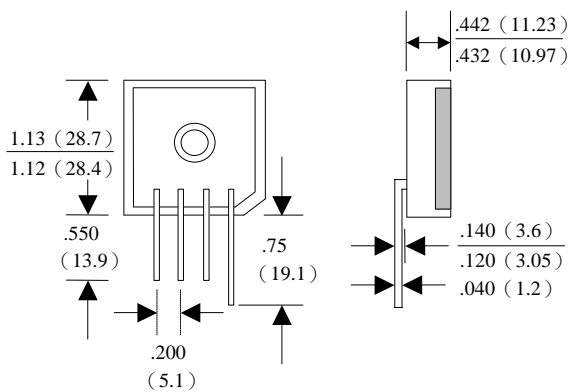
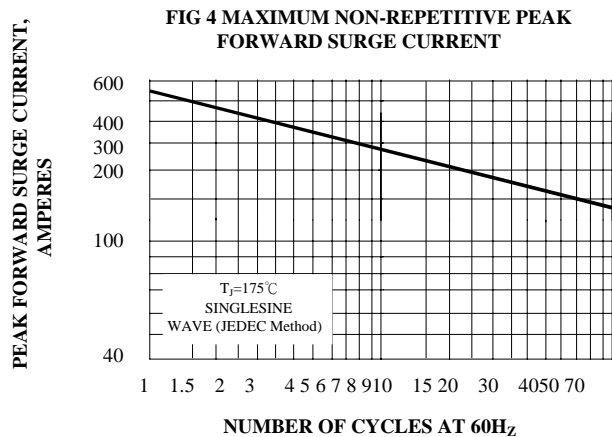
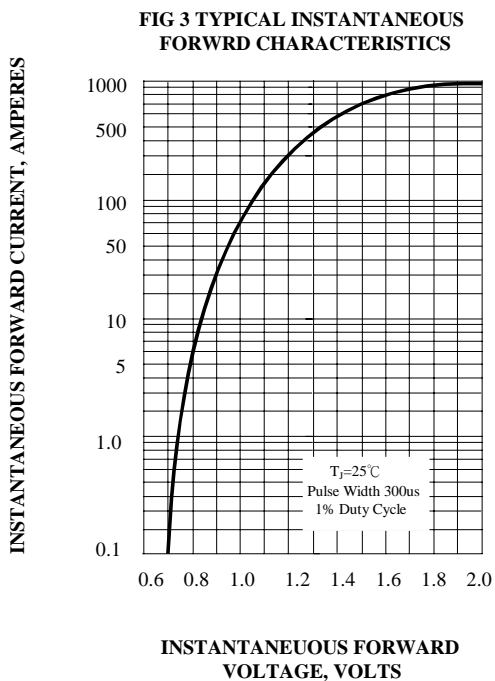
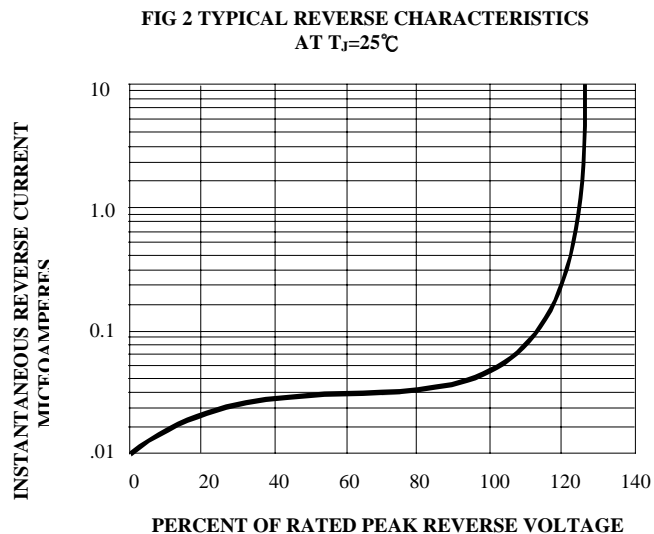
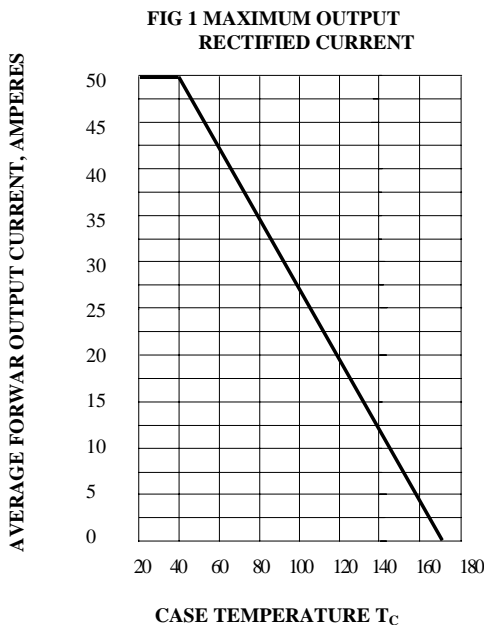
**ELECTRICAL CHARACTERISTICS (A<sub>T</sub> T<sub>A</sub> =25°C UNLESS OTHERWISE NOTED)**

CHARACTERISTICS	SYMBOL	BP50-005	BP50-01	BP50-02	BP50-04	BP50-06	BP50-08	BP50-10	UNITS	
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT AT SPECIFIED CURRENT	V <sub>F</sub>	1.1								V
MAXIMUM REVERSE DC CURRENT AT RATE DC BLOCKING VOLTAGE PER ELEMENT	I <sub>R</sub>	10								μA

NOTE : Suffix No. Versus Different Cases And Terminals

TERMINAL	CASE				
	SUFIX No	NORMAL METAL CASE	THIN METAL CASE	NORMAL PLASTIC CASE ALUMINUM BASE	THIN PLASTIC CASE ALUMINUM BASE
FAST ON TERMINALS		NO SUFFIX	S	P	PS
WIRE LEAD TERMINALS		W	WS	PW	PWS
IN LINE PIN CONFIGURATION		-	-	L	LS

# RATINGS AND CHARACTERISTIC CURVES BP50-005 THRU BP50-10



**BP50-L IN LINE PIN CONFIGURATION (PLASTIC CASE)**