



**FRONTIER  
ELECTRONICS CO., LTD.**

**BP50-005G  
THRU  
BP50-10G**

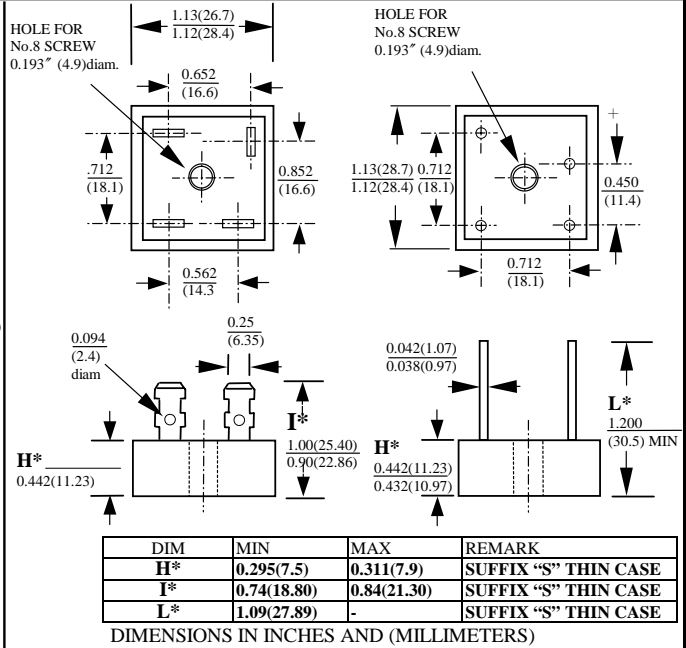
**50A HIGH CURRENT SILICON BRIDGE RECTIFIERS**

**FEATURES**

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

**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 -005G	BP50 -01G	BP50 -02G	BP50 -04G	BP50 -06G	BP50 -08G	BP50 -10G	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

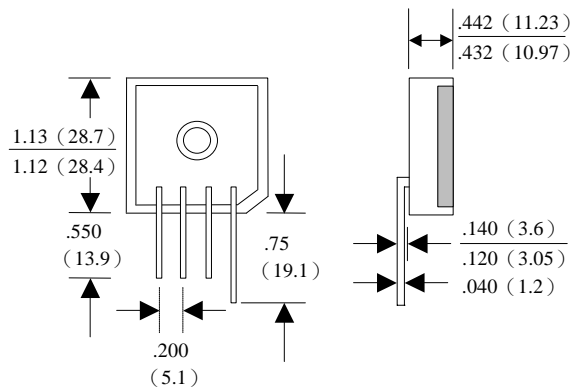
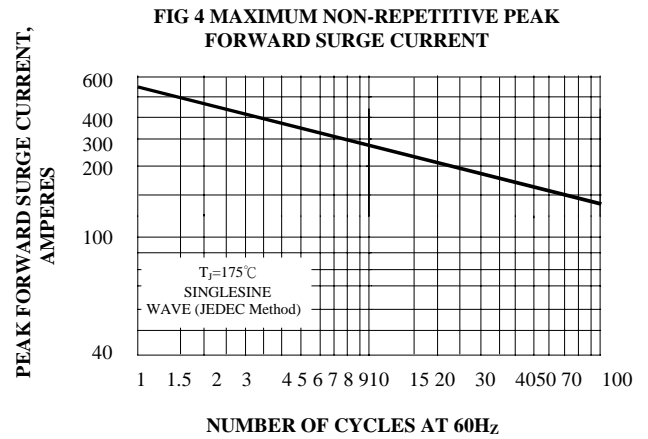
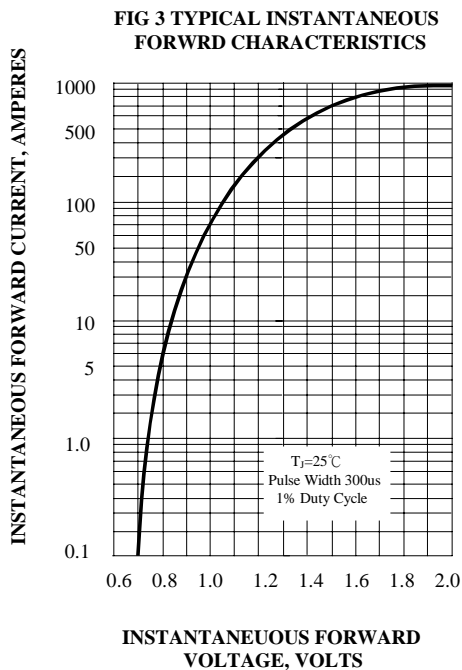
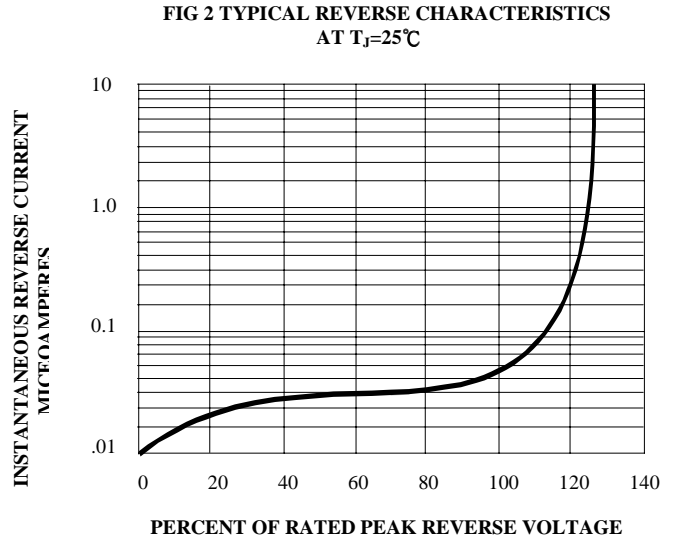
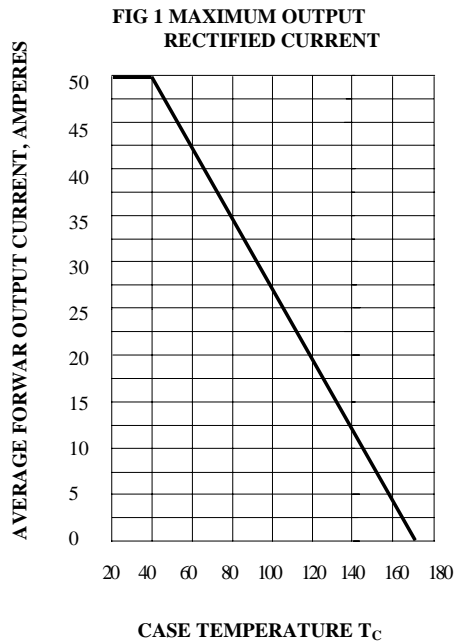
**ELECTRICAL CHARACTERISTICS (At T<sub>A</sub> =25°C UNLESS OTHERWISE NOTED)**

CHARACTERISTICS	SYMBOL	BP50 -005G	BP50 -01G	BP50 -02G	BP50 -04G	BP50 -06G	BP50 -08G	BP50 -10G	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		NORMAL PLASTIC CASE ALUMINUM BASE	THIN PLASTIC CASE ALUMINUM BASE
	SUFFIX No	NORMAL METAL CASE		
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 BP50-005G THRU BP50-10G



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