

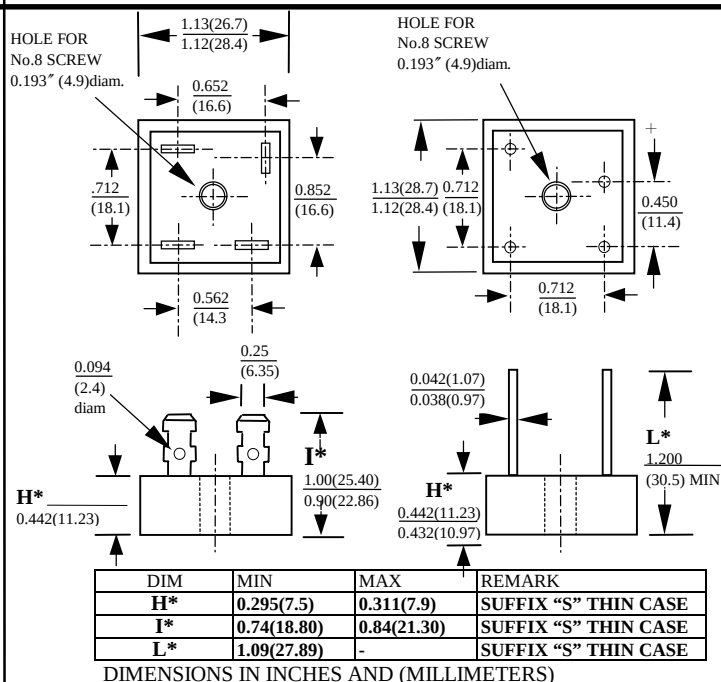
50A HIGH CURRENT SILICON BRIDGE RECTIFIERS

FEATURES

- CURRENT RATING 50A
- REVERSE VOLTAGE RATING UP TO 1000V
- TYPICAL IR LESS THAN 1 μ A
- 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_{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 AT TC=55°C	I_O	50.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	550							A
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 175							°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 175							°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ 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_F	1.1							V
MAXIMUM REVERSE DC CURRENT AT RATE DC BLOCKING VOLTAGE PER ELEMENT	I_R	10							μ A

NOTE : Suffix No. Versus Different Cases And Terminals

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

RATINGS AND CHARACTERISTIC CURVES BP50 SERIES

FIG 1 MAXIMUM OUTPUT
RECTIFIED CURRENT

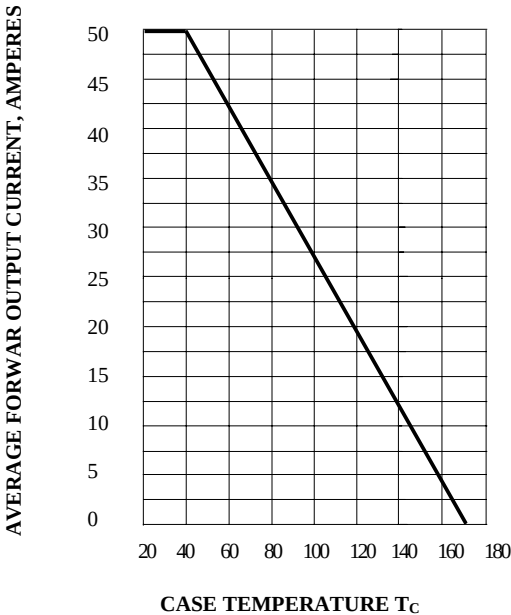


FIG 2 TYPICAL REVERSE CHARACTERISTICS
AT $T_J=25^\circ\text{C}$

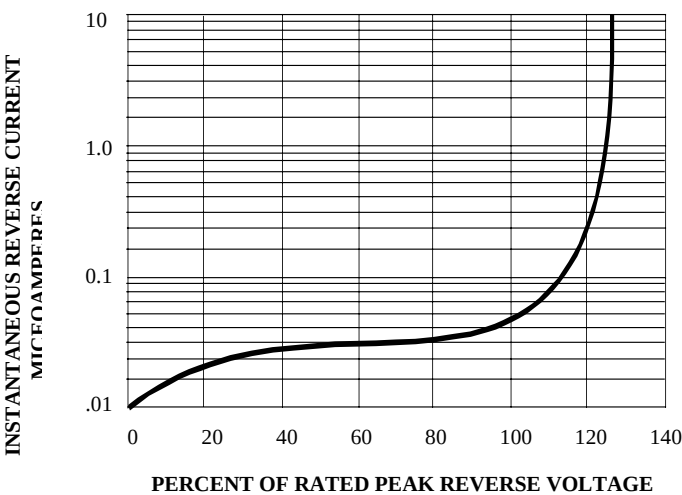


FIG 3 TYPICAL INSTANTANEOUS
FORWRD CHARACTERISTICS

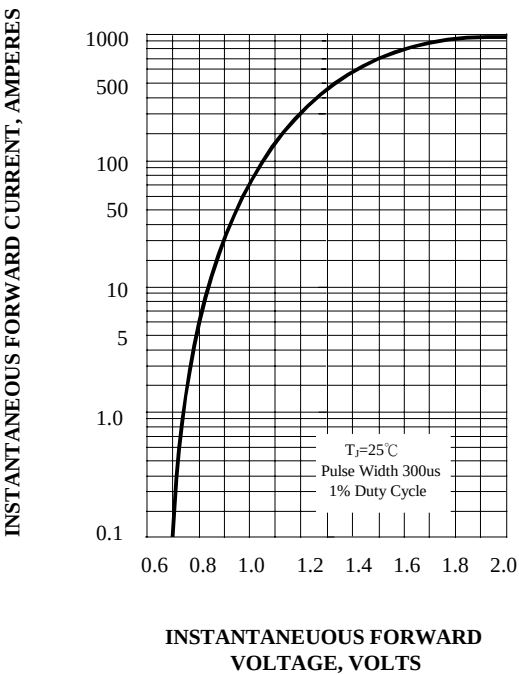
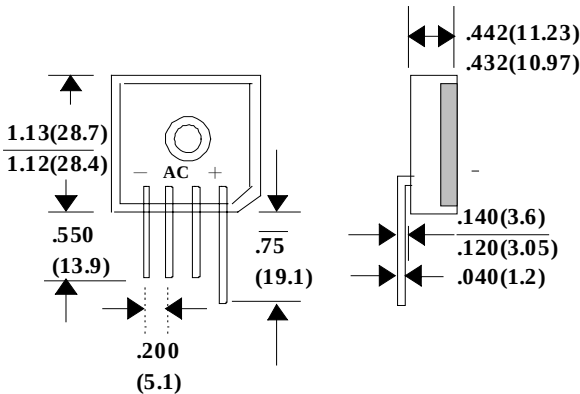
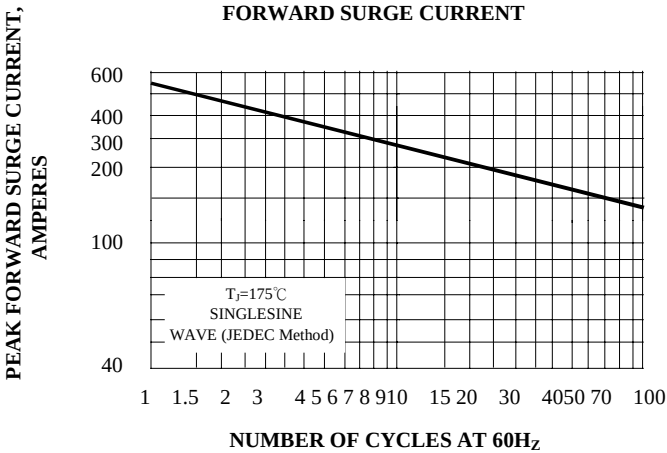


FIG 4 MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT



BL50-L IN LINE PIN CONFIGURATION
(PLASTIC CASE)