



**BP25-005  
THRU  
BP25-10**

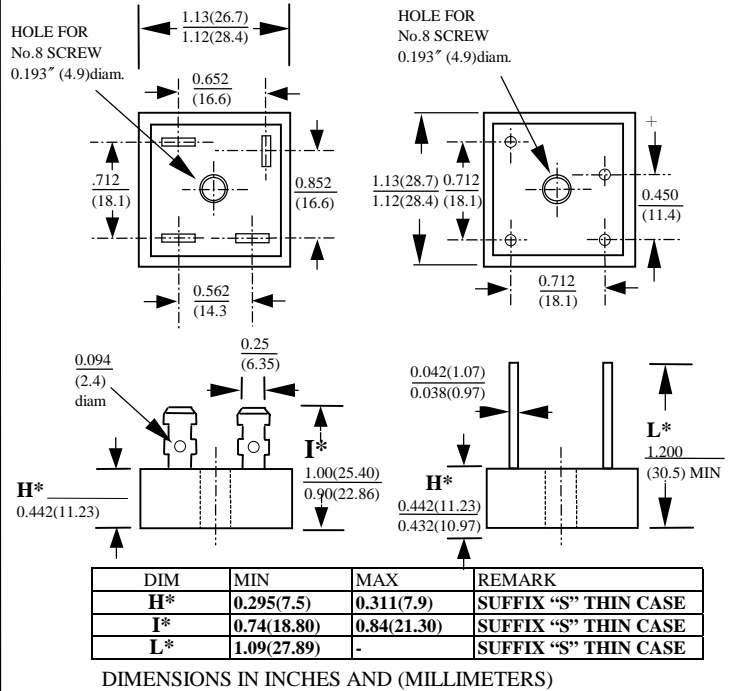
**25A HIGH CURRENT SILICON BRIDGE RECTIFIERS**

**FEATURES**

- CURRENT RATING 25A
- REVERSE VOLTAGE RATING UP TO 1000V
- TYPICAL IR LESS THAN 1μA
- HIGH TEMPERATURE SOLDERING GUARANTEED :  
260°C /10 SECONDS

**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	BP25-005	BP25-01	BP25-02	BP25-04	BP25-06	BP25-08	BP25-10	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>	25.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	I <sub>FSM</sub>	300							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	BP25-005	BP25-01	BP25-02	BP25-04	BP25-06	BP25-08	BP25-10	UNITS
MAXIMUM INSTANTANEOUS FORWARD VOLTAGE PER BRIDGE ELEMENT AT SPECIFIED CURRENT	V <sub>F</sub>	1.1							V
MAXIMUM REVERSE DC CURRENT AT RATED DC BLOCKING VOLTAGE PER ELEMENT	I <sub>R</sub>	10							μA

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
	FAST ON TERMINALS	<b>NO SUFFIX</b>	<b>S</b>	<b>P</b>
WIRE LEAD TERMINALS	<b>W</b>	<b>WS</b>	<b>PW</b>	<b>PWS</b>
IN LINE PIN CONFIGURATION	<b>L</b>	<b>LS</b>	<b>PL</b>	<b>PLS</b>

# RATINGS AND CHARACTERISTIC CURVES BP25 SERIES

FIG. 1 - MAXIMUM OUTPUT RECTIFIED CURRENT

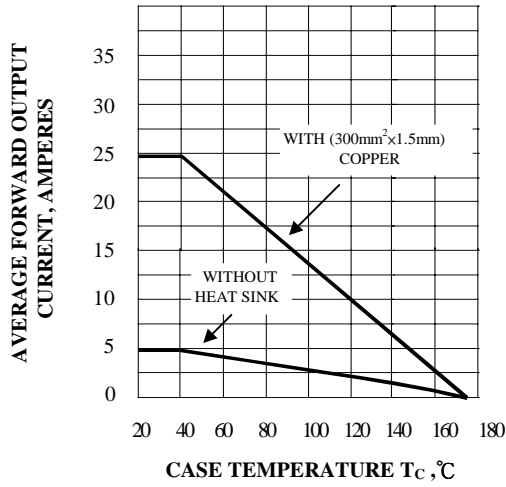


FIG. 2 - TYPICAL REVERS CHARACTERISTICS AT  $T_j=25^\circ\text{C}$

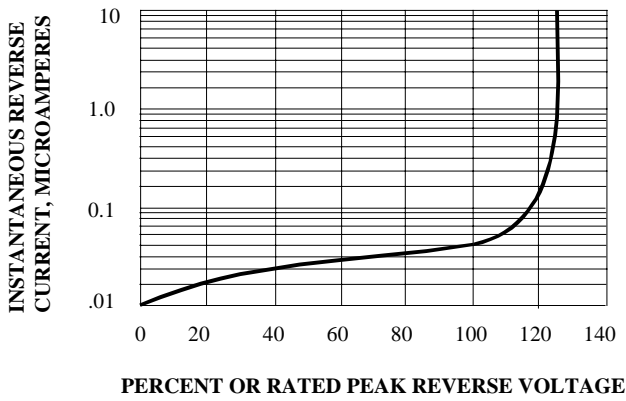


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

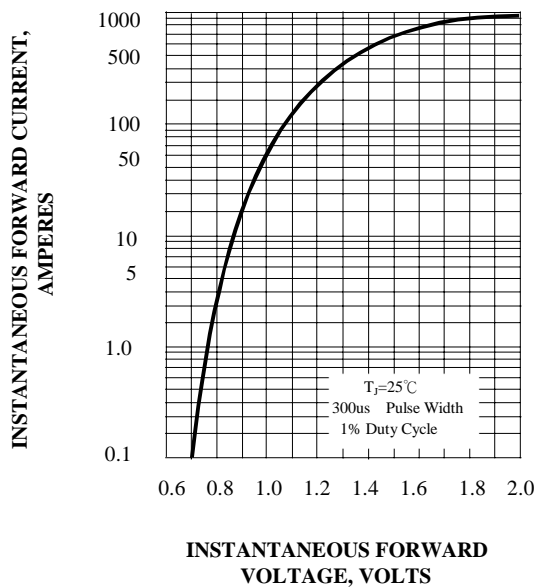


FIG. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

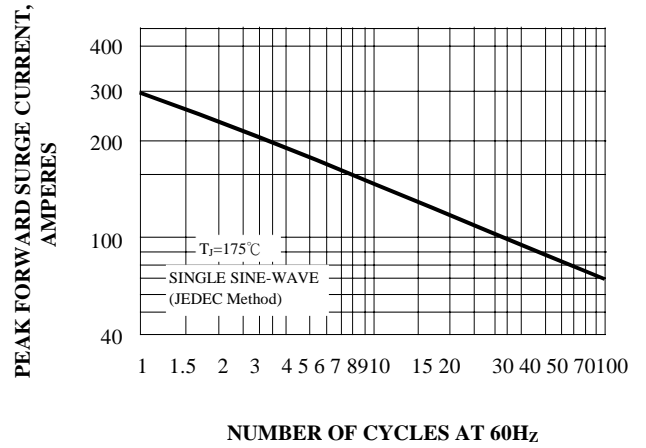
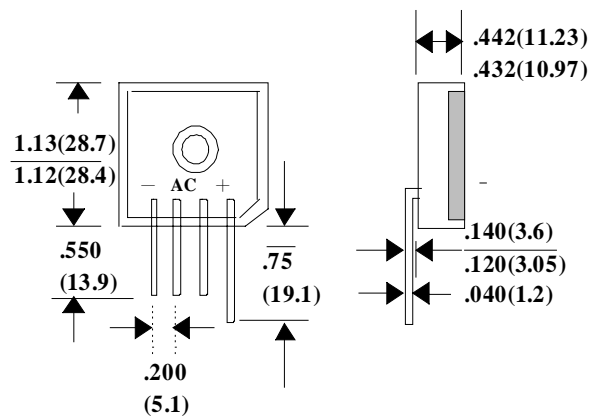
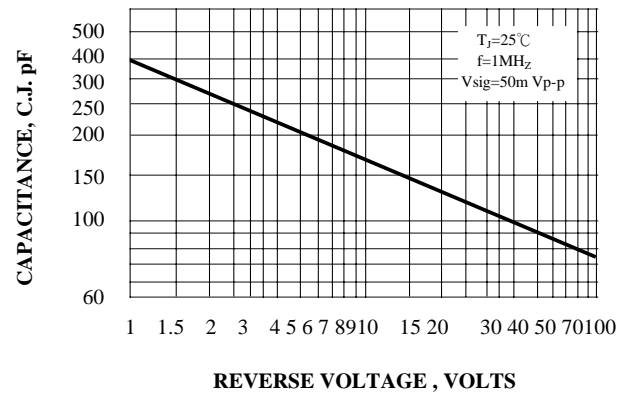


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



BL25-L IN LINE PIN CONFIGURATION (PLASTIC CASE)