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25A HIGH CURRENT SILICON BRIDGE RECTIFIERS

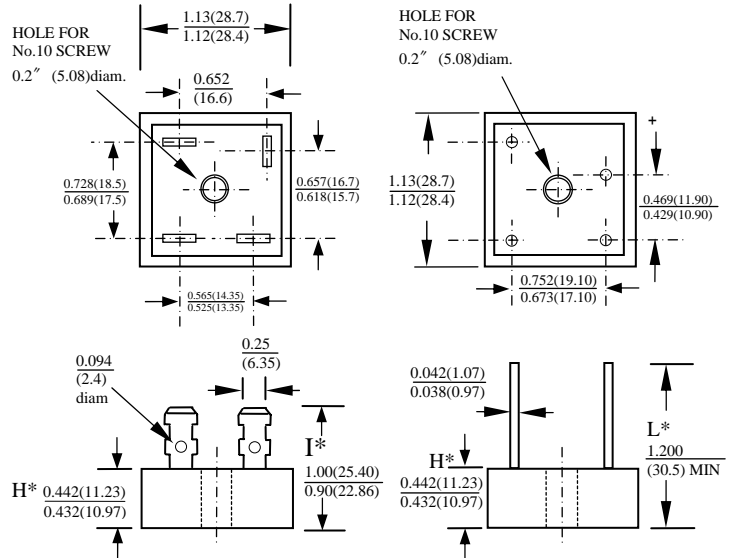
BP25-005 THRU BP25-10

FEATURES

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

MECHANICAL DATA

- CASE: METAL HEAT SINK CASE, ELECTRICALLY INSULATED
- TERMINALS: UNIVERSAL .25" (6.3mm) FAST ON DIMENSIONS IN INCHES AND (MILLIMETERS)
- MOUNTING METHOD: BOLT DOWN ON HEAT SINK WITH SILICON THERMAL COMPOUND BETWEEN BRIDGE AND MOUNTING SURFACE FOR MAXIMUM HEAT TRANSFER EFFICIENCY
- WEIGHT: 20 GRAMS



DIM	MIN	MAX	REMARK
H*	0.295(7.5)	0.311(7.9)	SUFFIX "S" THIN CASE
I*	0.74(18.80)	0.84(21.30)	SUFFIX "S" THIN CASE
L*	1.09(27.89)	-	SUFFIX "S" THIN CASE

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_{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	25.0							A
PEAK FORWARD SURGE CURRENT SINGLE SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	300							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	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_F	1.1							V
MAXIMUM REVERSE DC CURRENT AT RATED DC BLOCKING VOLTAGE PER ELEMENT	I_R	10							μ A

NOTE: Suffix No. Versus Different Cases and Terminals

TERMINAL	CASE				
	SUFFIX 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 BP25-005 THRU BP25-10

FIG. 1 - MAXIMUM OUTPUT RECTIFIED CURRENT

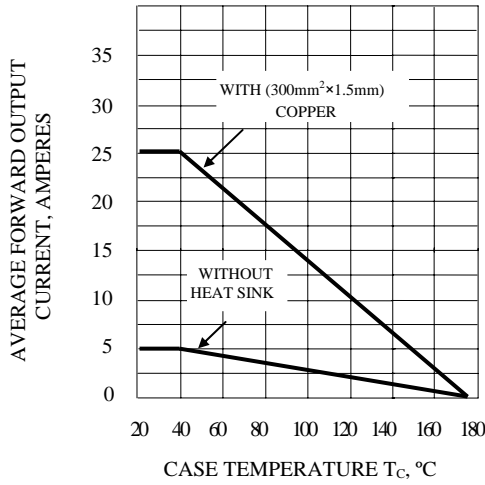


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS AT $T_J=25^\circ\text{C}$

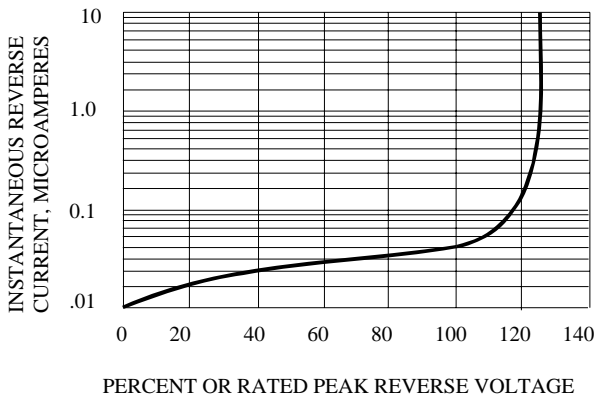


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

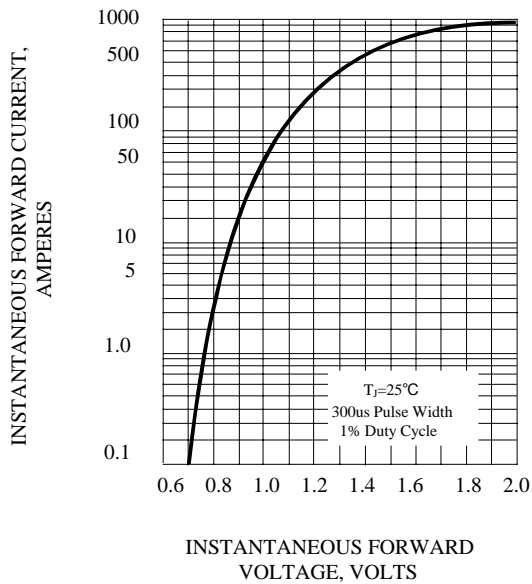


FIG. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

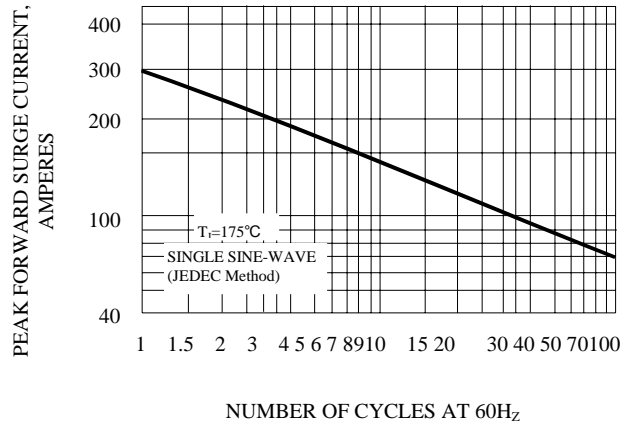
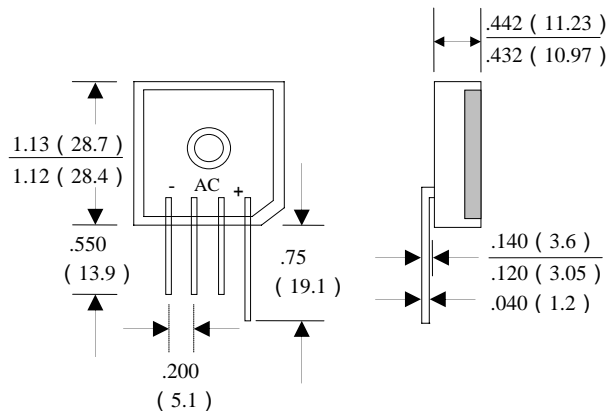
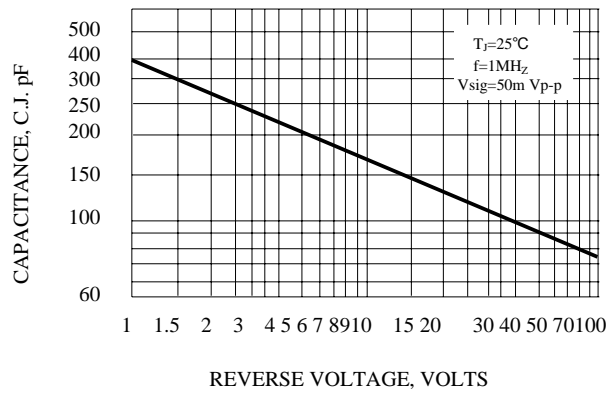


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



BP25-L IN LINE PIN CONFIGURATION (PLASTIC CASE)