KBPC35005W THRU KBPC3510W

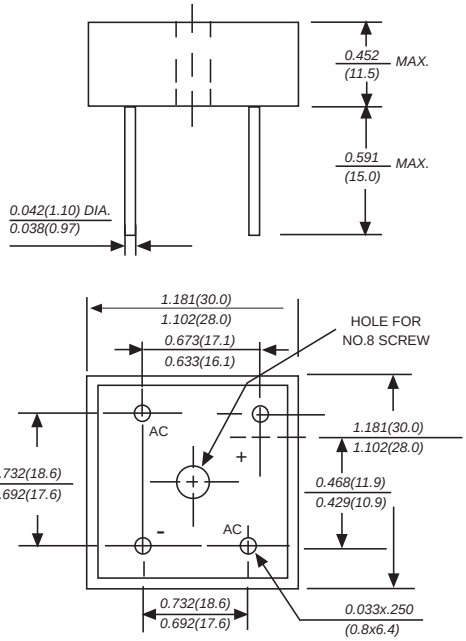
Reverse Voltage - 50 to 1000 Volts Forward Current -35.0 Amperes

SILICON BRIDGE RECTIFIERS

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds,5 lbs. (2.3kg) tension

KBPC-25W RoHS COMPLIANT



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC KBPC-25W Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position: Any
Weight : 0.93 ounce, 26.4 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwisespecified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	SYMBOLS	KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	UNITS
Marking Code		KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	30	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward output rectified current at Tc=50°C (N o t e 1 , 2)	$I_{(AV)}$	35.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							A
Rating for Fusing(t<8.3ms)	I^2t	664							A^2s
Maximum instantaneous forward voltage drop per birdge element at 17.5A	V_F	1.0							V
Maximum DC reverse current T_A=25°C	I_R	10							μA
at rated DC blocking voltage T_A=100°C		1.0							mA
Isolation voltage from case to leads	V_{IOS}	2500							V_{AC}
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.0							°C/W
Operating junction temperature range	T_J	-65 to +125							°C
storage temperature range	T_{STG}	-65 to +150							°C

NOTES:
1.Unit mounted on 9 ” x 3.5 ” x4.6 ” thick(23cmx9cmx11.8cmcm)Al.plate.
2.Bolt dowm on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #8 screw.

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

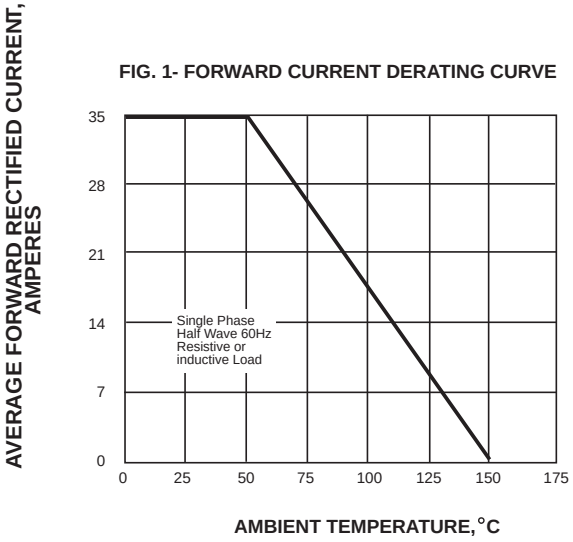


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

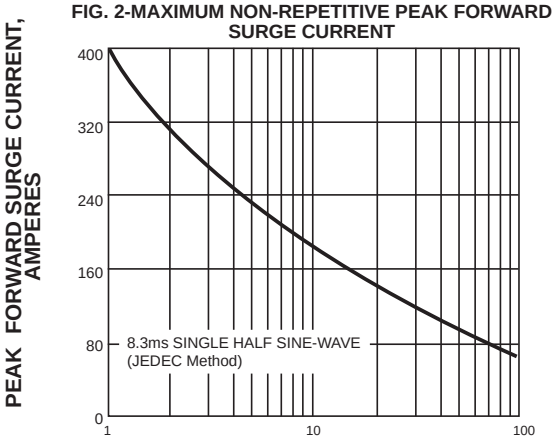


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

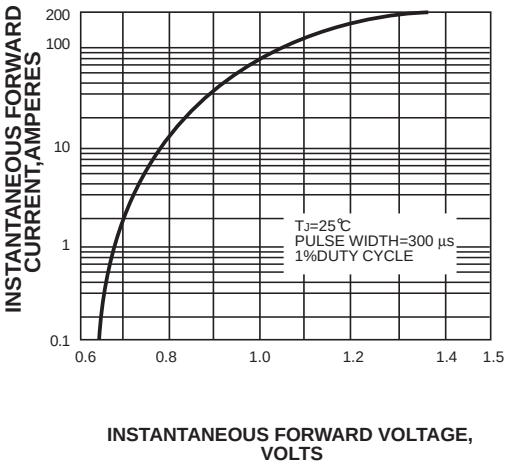


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

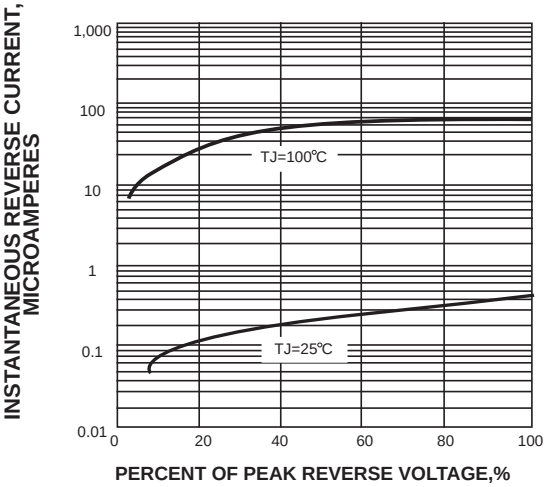


FIG. 5-TYPICAL JUNCTION CAPACITANCE

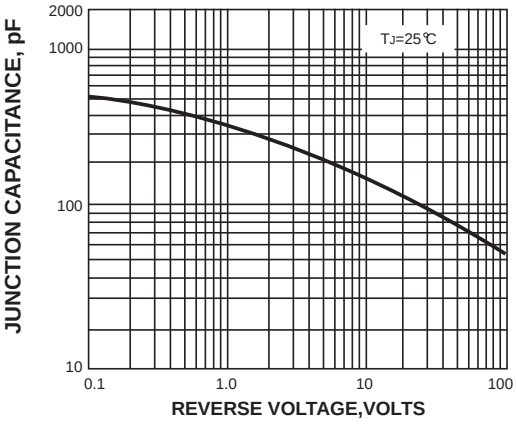
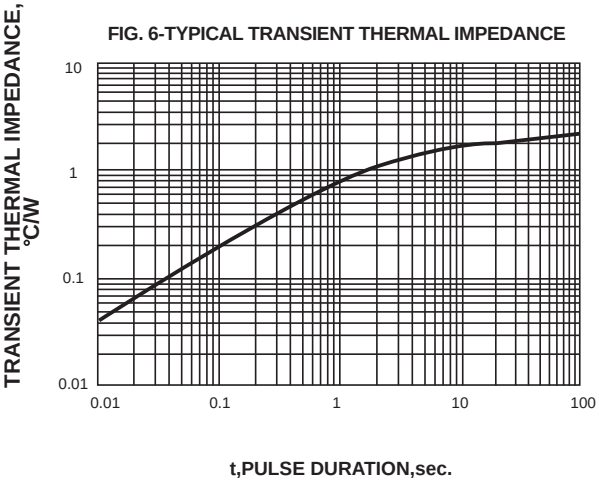


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.