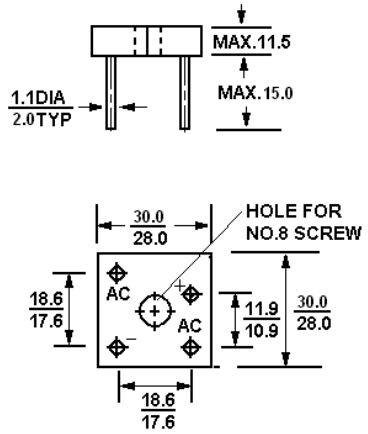
KBPC25005W~KBPC2510W

HIGH CURRENT SINGLE-PHASE SILICON BRIDGE RECTIFIERS
REVERSE VOLTAGE: 50V to 1000V
FORWARD CURRENT: 25A

KBPCW



Dimensions in mm

Features

- Surge overload 300 Amperes peak
- Low power loss, high efficiency
- Low reverse leakage current

Absolute Maximum Ratings and Characteristics

Rating at 25°C ambient temperature unless otherwise specified. resistive or inductive load 60 Hz,.
For capacitive load current by 20%.

Characteristic	KBPC 25005W	KBPC 2501W	KBPC 2502W	KBPC 2504W	KBPC 2506W	KBPC 2508W	KBPC 2510W	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_C = 55 °C	25							A
Peak Forward Surge Current, 8.3ms single half Sine-wave superimposed on rated load	300							A
Maximum Forward Voltage at 12.5A DC and 25℃	1.2							V
Maximum Reverse Current at T_A = 25°C at Rated DC Blocking Voltage T_A = 125°C	10 1000							uA
Typical Junction Capacitance (Note 1)	300							pF
Typical Thermal Resistance (Note 2)	1.9							℃/W
Operating Temperature Range T_J	-55 to +125							°C
Storage Temperature Range T_{Stg}	-55 to +150							°C

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4.0VDC.

2. Thermal resistance from junction t case per leg.

Dated : 19/07/2005

RATINGS AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD SURGE CURRENT

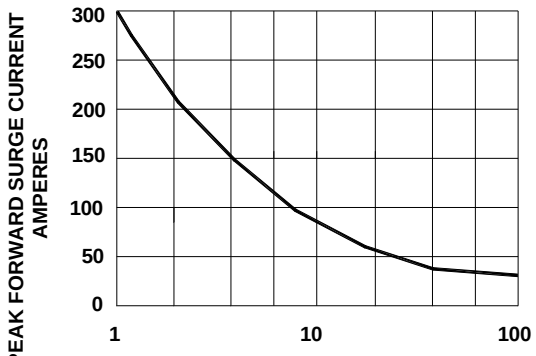


FIG.2-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

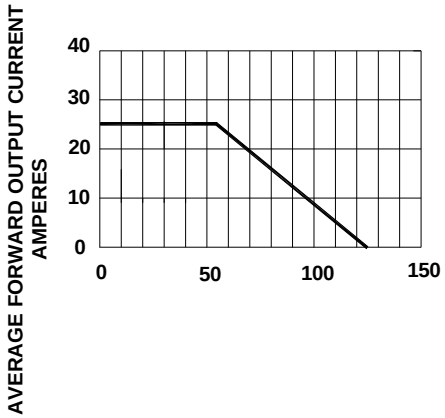


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

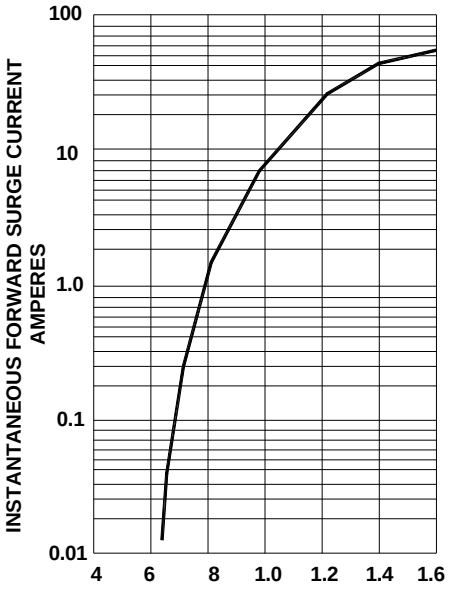


FIG 4. Typical Reverse Leakage Characteristics