

KBPC2500W - KBPC2510W

PRV : 50 - 1000 Volts

Io : 25 Amperes

FEATURES :

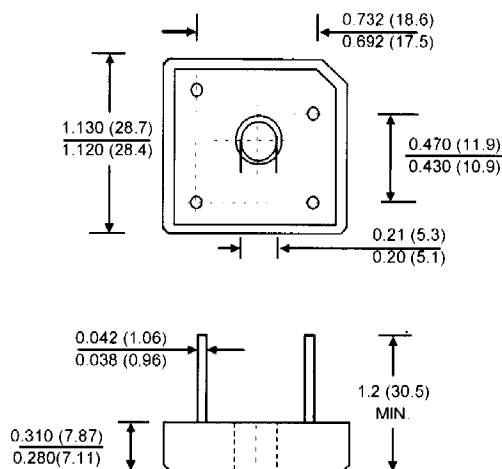
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : Metal Case
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : plated .25" (6.35 mm). Faston
- * Polarity : Polarity symbols marked on case
- * Mounting position : Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency.
- * Weight : 15.95 grams (approximately)

SILICON BRIDGE RECTIFIERS

BR50W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

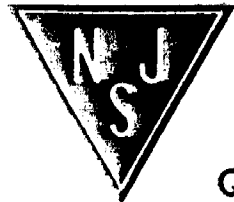
RATING	SYMBOL	KBPC 2500W	KBPC 2501W	KBPC 2502W	KBPC 2504W	KBPC 2506W	KBPC 2508W	KBPC 2510W	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Current Tc = 55°C	IF(AV)	25							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	300							A
Current Squared Time at t < 8.3 ms	I ² t	375							A ² S
Maximum Forward Voltage per Diode at IF = 12.5 A	VF	1.1							V
Maximum DC Reverse Current Ta = 25 °C	IR	10							μA
at Rated DC Blocking Voltage Ta = 100 °C	IR(H)	200							μA
Typical Thermal Resistance (Note 1)	RθJC	1.45							°C/W
Operating Junction Temperature Range	TJ	- 40 to + 150							°C
Storage Temperature Range	TSTG	- 40 to + 150							°C

Note :

1. Thermal Resistance from junction to case with units mounted on a 5" x 6" x 4.9" (12.8cm.x 15.2cm.x 12.4cm.) Al.-Finned Plate

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Quality Semi-Conductors



RATING AND CHARACTERISTIC CURVES (KBPC2500W - KBPC2510W)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

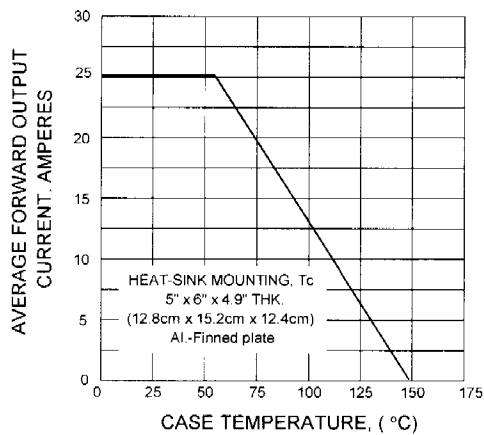


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

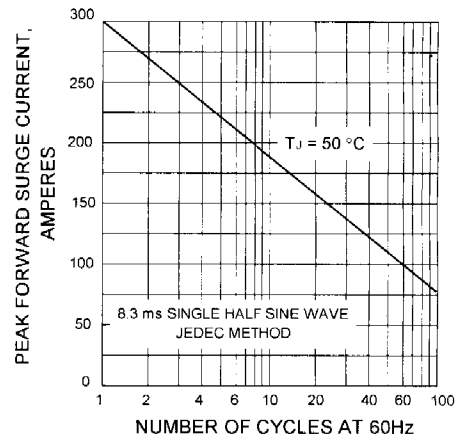


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

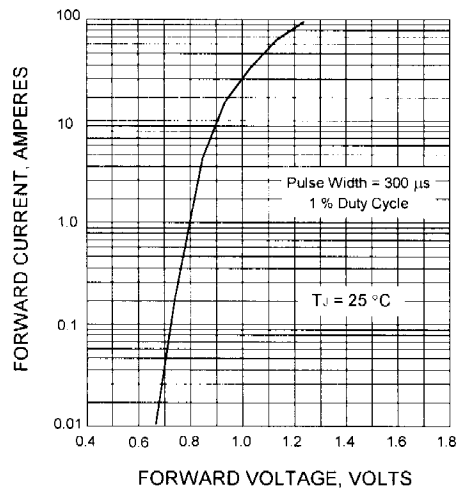


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

