



KBPC10,15,25,35,50 SERIES

SILICON BRIDGE RECTIFIERS

FEATURES

- Integrally molded heatsinks provide very low thermal resistance for maximum
- Surge overload rating: 400 amperes.
- Terminals either universal .25 (6.35mm) FASTON or wire leads.
- High temperature soldering guaranteed: 265 °C / seconds/ 5lbs., [2.3kg] tension.

MECHANICAL DATA

Case: metal or molded plastic with heatsink integrally mounted in the bridge encapsulation.

Suffix letter "P" added to indicate plastic.

Terminals: Either plated .25" (6.35mm) FASTON or plated copper

leads .040" [1.02mm] diameter.

Suffix letter "W" added to indicate leads.

Weight: 31 grams.

Mounting position: bolt down on heat-sink with sillcone thermal compound between bridge and mounting surface for maximum head transfer efficiency.

Mounting Torque: 20 in.lb. max.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave,60Hz, resistive or inductive load 60Hz. For capacitive load, derate current by 20%.

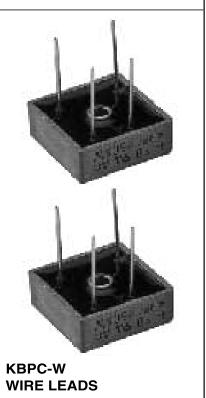
RATINGS-00-0Maximum Recurrent Peak Reverse Voltage50100Maximum RMS Bridge Input Voltage3570	0 200		-06 600	-08	-10	UNITS
	_	400	600			
Maximum RMS Bridge Input Voltage 35 70) 140		000	800	1000	V
		280	420	560	700	V
Maximum DC Blocking Voltage 50 100	0 200	400	600	800	1000	V
Maximum Average Forward Rectified output current at Tc = 55°C KBPC15 KBPC25 KBPC35 KBPC35	10 15 25 35 50					A
Peak Forward Surge Current single sine-wave KBPC10 superimposed on rated load (JEDEC Method) KBPC25 KBPC35 KBPC50		200 300 300 400 400				A
Maximum KBPC10 Instantaneous KBPC15 Forward Voltage per KBPC25 Bridge Element at KBPC35 Specified Current KBPC50 Specified Current KBPC50	1.0					v
IsolationVoltage From case to leads	2500					V
Maximum DC Reverse Current at Rated DC Blocking voltage per element	10.0					$\mu_{\mathbf{A}}$
Maximum Thermal Resistance θ J-C (Note)	1.2				°C/W	
Operating Temperature Range T _A	-65 to +125					°C
Storage Temperature Range Tstg	-65 to +150					°C







KBPC STANDARD







RATING AND CHARACTERISTIC CURVES KBPC10,15,25,35,50,SERIES

FIG. 1-MAXIMUM FORWARD SURGE CURRENT

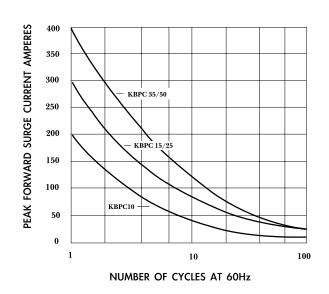


FIG. 2-DERATING CURVE OUTPUT RECTIFIED CURRENT

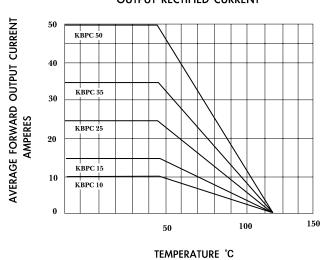
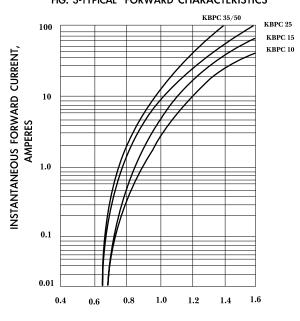


FIG. 3-TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

PERCENT OF RATED PEAK REVERSE VOLTAGE

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

