



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 silicone 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	-01	-02	-04	-06	-08	-10	UNITS
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 output current at Tc = 55°C	KBPC10 KBPC15 KBPC25 KBPC35 KBPC50				10 15 25 35 50				A
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC Method)	KBPC10 KBPC15 KBPC25 KBPC35 KBPC50				200 300 300 400 400				A
Maximum Instantaneous Forward Voltage per Bridge Element at Specified Current	KBPC10 KBPC15 KBPC25 KBPC35 KBPC50	IF		{ 5A 7.5A 12.5A 17.5A 25A		1.0			V
Isolation Voltage From case to leads					2500				V
Maximum DC Reverse Current at Rated DC Blocking voltage per element					10.0				µA
Maximum Thermal Resistance θ J-C (Note)					1.2				°C/W
Operating Temperature Range T _A					-65 to +125				°C
Storage Temperature Range T _{STG}					-65 to +150				°C



KBPC STANDARD



KBPC-W WIRE LEADS

NOTE : Thermal Resistance from junction to Case for total bridge



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

FIG. 1-MAXIMUM FORWARD SURGE CURRENT

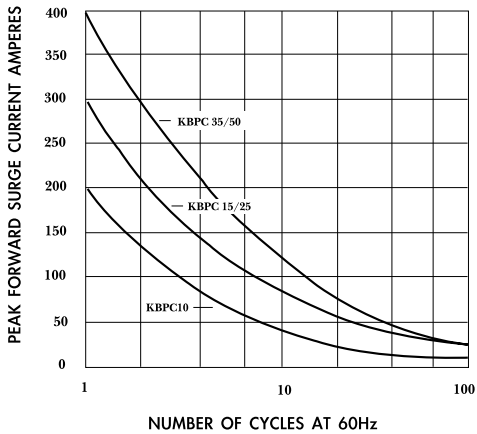


FIG. 2-DERATING CURVE
OUTPUT RECTIFIED CURRENT

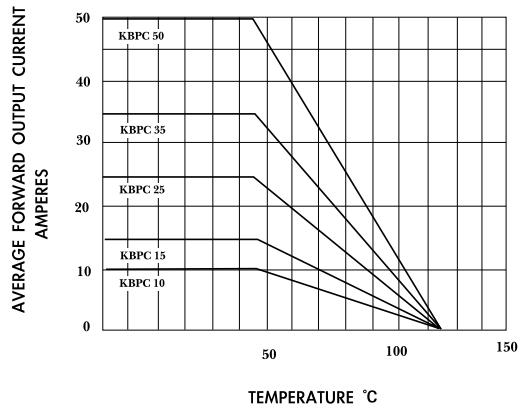


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

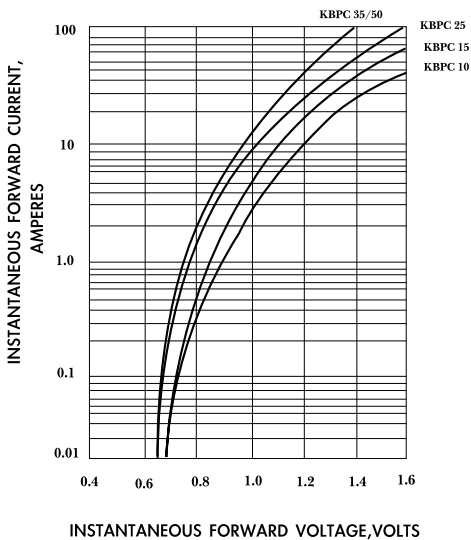


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

