KBPC10005 THRU KBPC5010

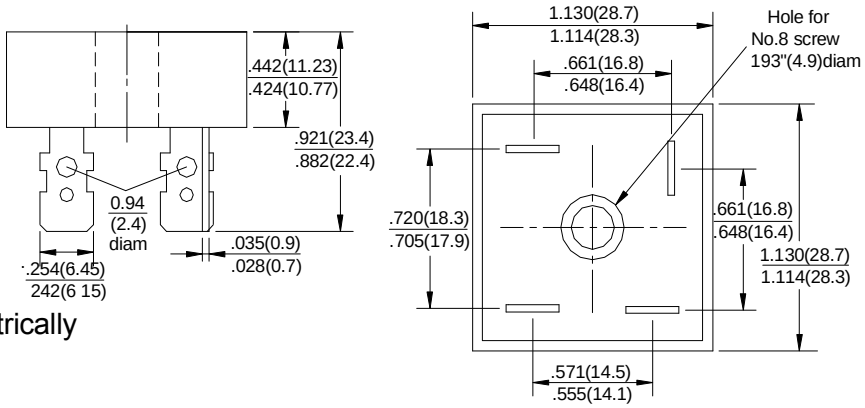
10A/15A/25A/35A/50A BRIDGE RECTIFIER

FEATURES

- Surge overload 240~500A peak
- Low forward voltage drop
- Case to terminal isolation voltage 2000V

MECHANICAL DATA

- Case: KBPC
- Case material: Metal case with electrically Isolated epoxy
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Weight: 32 grams (approximate)



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND CHARACTERISTICS(T_A=25°C unless otherwise specified)

Parameter	Symbol	KBPC							Unit
		10005 15005 25005 35005 50005	1001 1501 2501 3501 5001	1002 1502 2502 3502 5002	1004 1504 2504 3504 5004	1006 1506 2506 3506 5006	1008 1508 2508 3508 5008	1010 1510 2510 3510 5010	
Maximum recoverable peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC block voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current @T_C=55℃	I_F	KBPC10 serial: 10A; KBPC15 serial: 15A KBPC25 serial: 25A; KBPC35 serial: 35A KBPC50 serial: 50A							A
Peak forward surge current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	KBPC10 serial: 240A; KBPC15 serial: 300A KBPC25 serial: 400A; KBPC35 serial: 400A KBPC50 serial: 500A							A
Operating temperature range	T_J	-55 ~ +125							°C
Storage temperature range	T_{STG}	-55 ~ +125							°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Max.	Unit	Conditions
Maximum forward voltage drop per element	V_F	1.1	V	I_F=5.0A for KBPC10 serial I_F=7.5A for KBPC15 serial I_F=12.5A for KBPC25 serial I_F=17.5A for KBPC35 serial I_F=25A for KBPC50 serial
Maximum reverse current	I_R	10	μA	V_R=V_{DC}

Note:

1.Resistive or inductive load 60Hz;

2.For capacitive load derate by 20%.

10A/15A/25A/35A/50A BRIDGE RECTIFIER

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

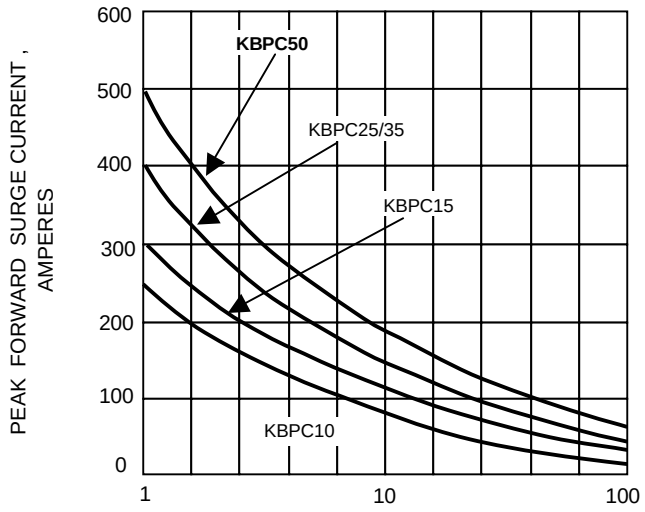


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

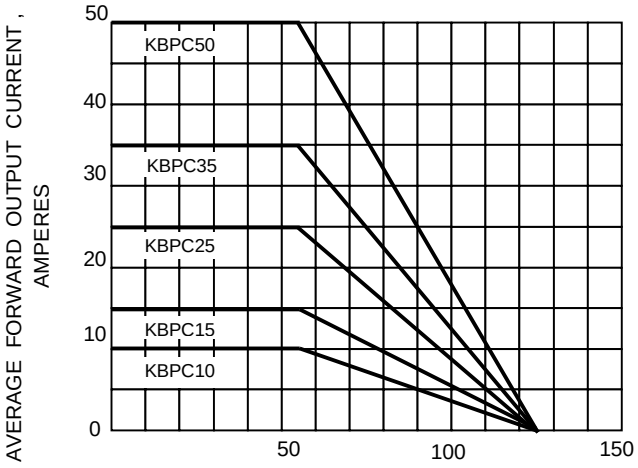


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

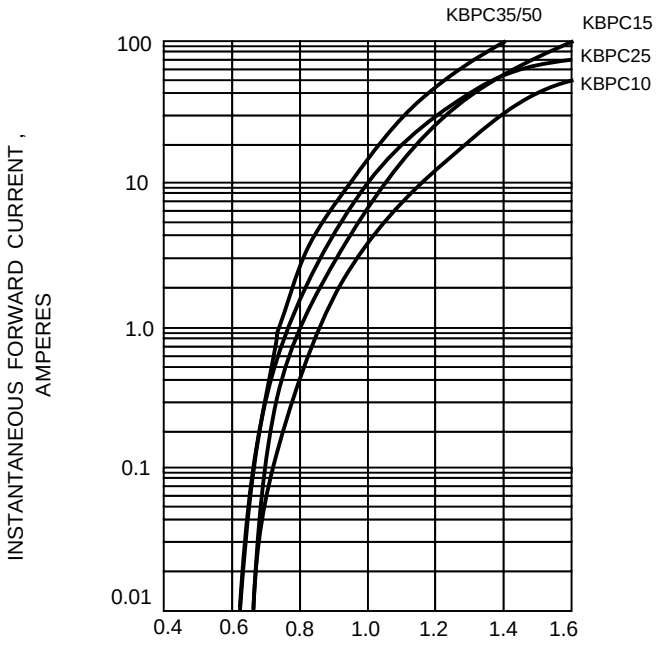


FIG.4-TYPICAL REVERSE
CHARACTERISTICS