

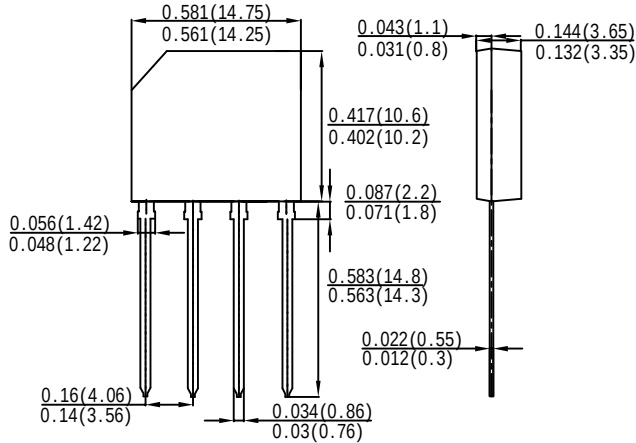


KBP4005K THRU KBP410K

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Amperes

KBP-K



Dimensions in inches and (millimeters)

FEATURES

- ◆ Glass passivated die construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High surge current capability
- ◆ Plastic material-UL flammability 94V-O

MECHANICAL DATA

Case: KBP-K Molded plastic body

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Polarity: As marked on case

Mounting Position: Any

Marking : Type number

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	KBP 4005K	KBP 401K	KBP 402K	KBP 404K	KBP 406K	KBP 408K	KBP 410K	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward output rectified current at TA=50°C(Note 1)	I _{AV}	4.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80.0							Amps
Forward voltage per element @IF=4.0A	V _F	1.1							Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R	5.0							μA
		0.5							mA
Typical Thermal Resistance per leg(Note 2)	RθJA	40							°C/W
	RθJL	20							
Operating junction temperature range	TJ,TSTG	-55 to +150							°C

Note:1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..



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RATINGS AND CHARACTERISTIC CURVES KBP4005K THRU KBP410K

Fig. 1 Forward Current Derating Curve

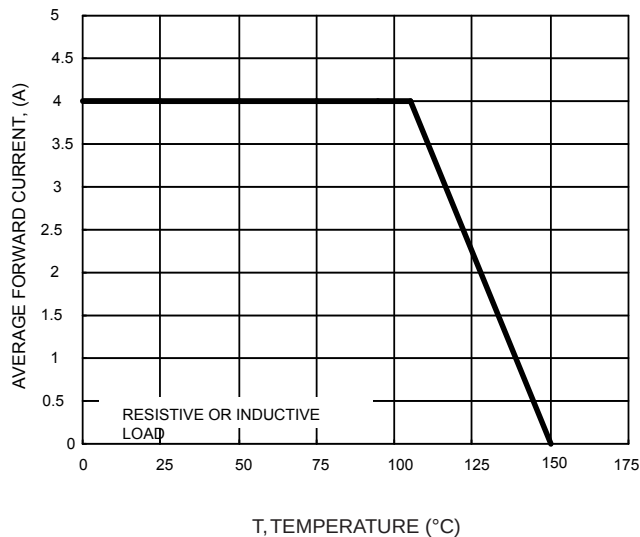


Fig. 2 Typical Fwd Characteristics

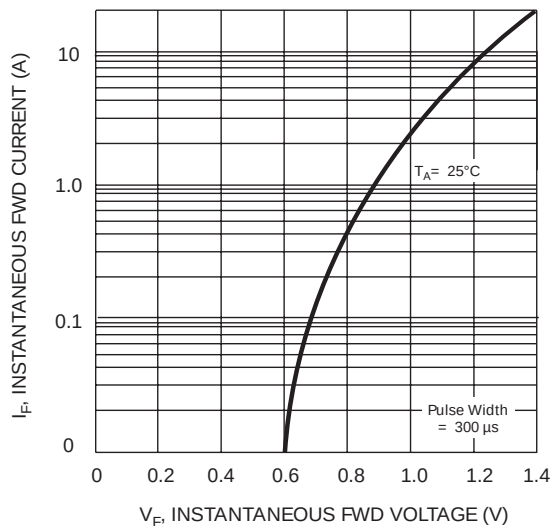


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

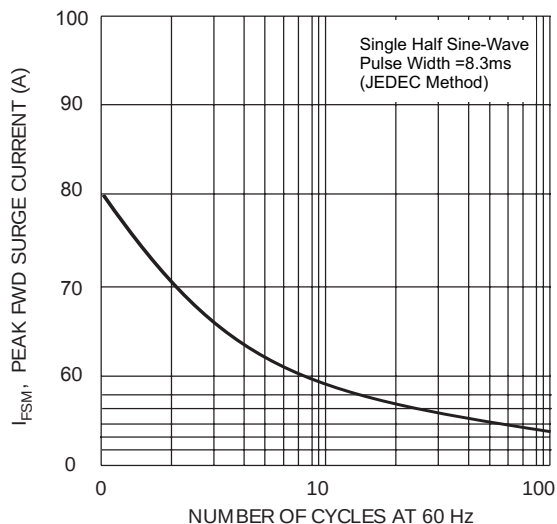
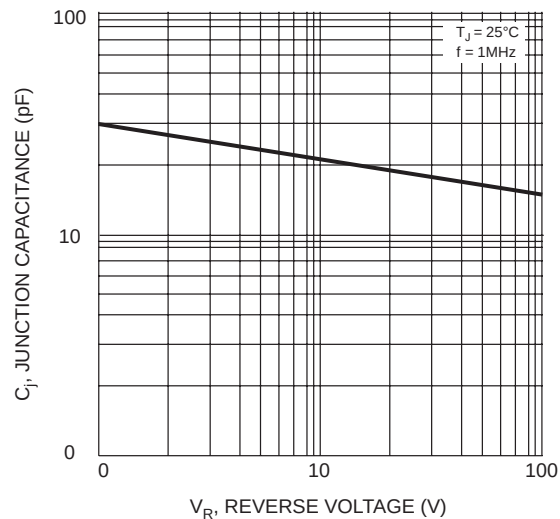


Fig. 4 Typical Junction Capacitance



The cruve graph is for reference only, can't be the basis for judgment()!

