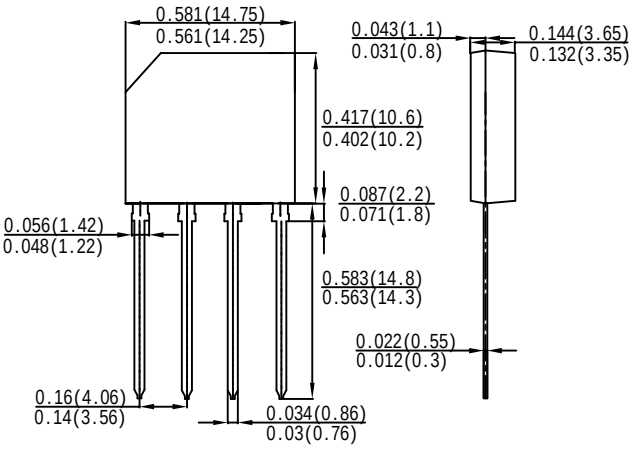
KBP4005K THRU KBP410K

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℃ 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 T_A=50℃(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 T_A=25℃	I_R	5.0							μA
at rated DC blocking voltage T_A=125℃		0.5							mA
Typical Thermal Resistance per leg(Note 2)	$R_{\theta JA}$	40							°C/W
	$R_{\theta JL}$	20							
Operating junction temperature range	T_J, T_{STG}	-55 to +150							℃

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..

RATINGS AND CHARACTERISTIC CURVES KBP4005K THRU KBP410K

Fig. 1 Forward Current Derating Curve

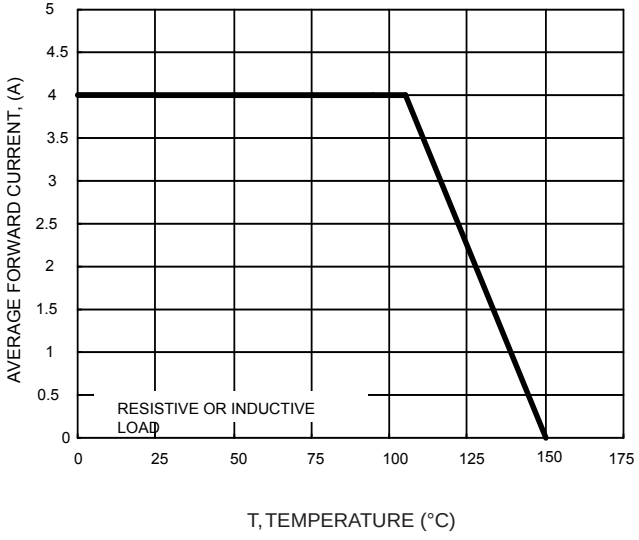


Fig. 2 Typical Fwd Characteristics

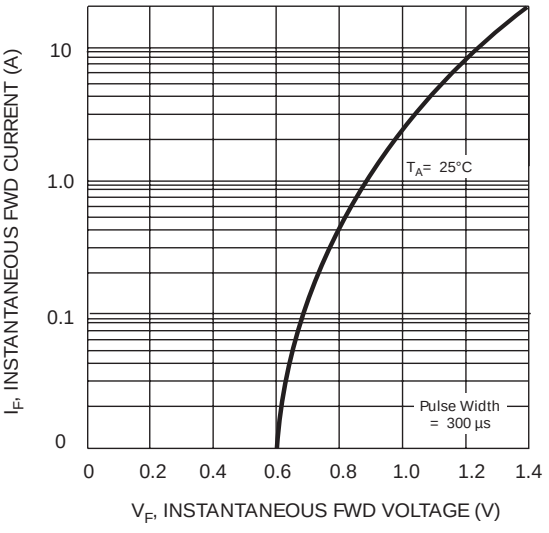


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

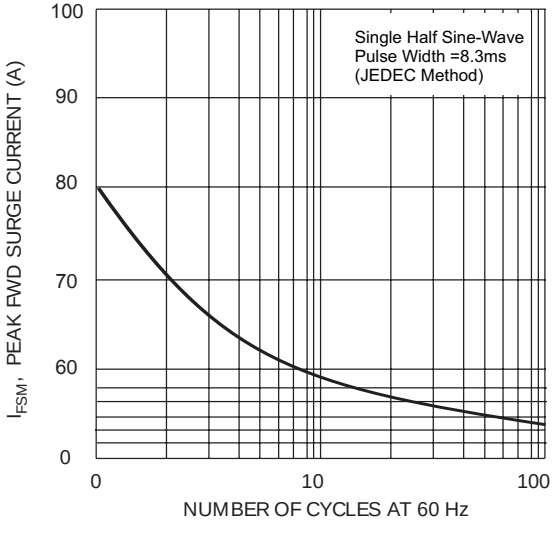
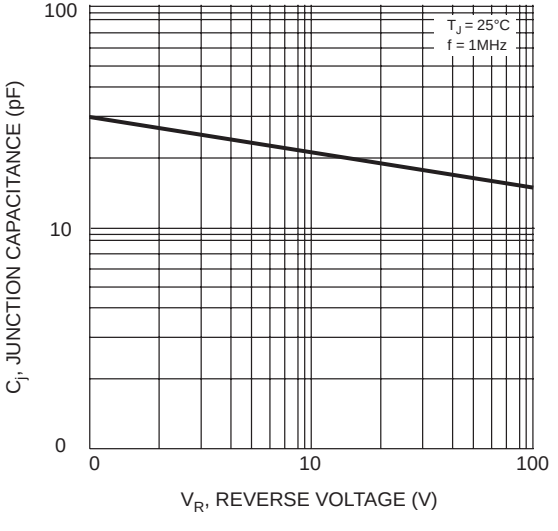


Fig. 4 Typical Junction Capacitance



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