

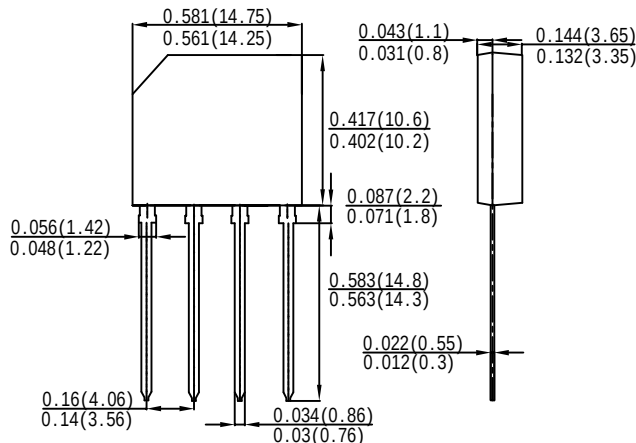


KBP3005K THRU KBP310K

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 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 3005K	KBP 301K	KBP 302K	KBP 304K	KBP 306K	KBP 308K	KBP 310K	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°C(Note 1)	I _{AV}	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60.0							Amps
Forward voltage per element @ I _F =3.0A	V _F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0							μA
		0.5							mA
Typical Thermal Resistance per leg(Note 2)	R _{θJA}	30							°C/W
	R _{θJL}	11							
Operating junction temperature range	T _J , T _{STG}	-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..



www.microdiode.com

RATINGS AND CHARACTERISTIC CURVES KBP3005K THRU KBP310K

Fig. 1 Forward Current Derating Curve

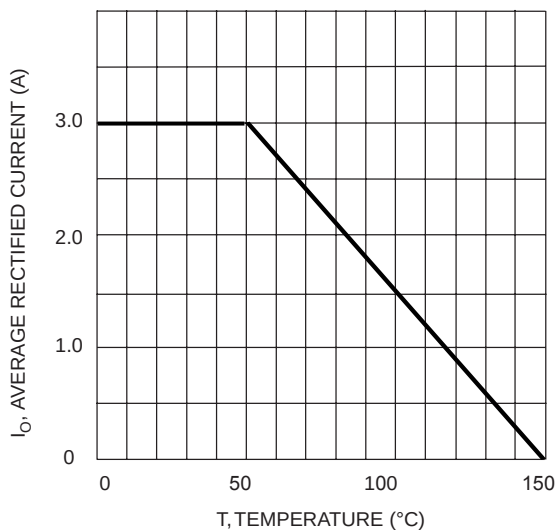


Fig. 2 Typical Fwd Characteristics

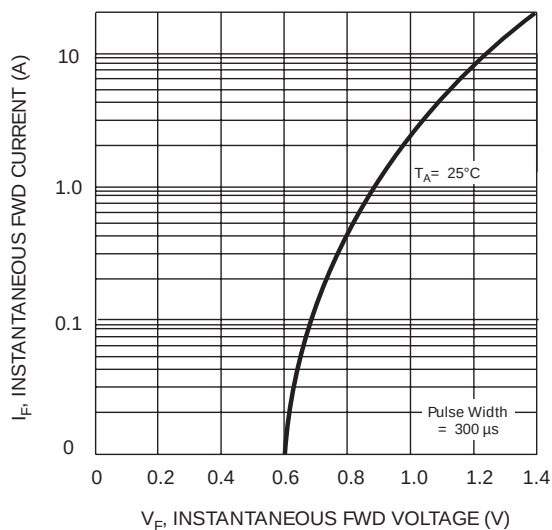


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

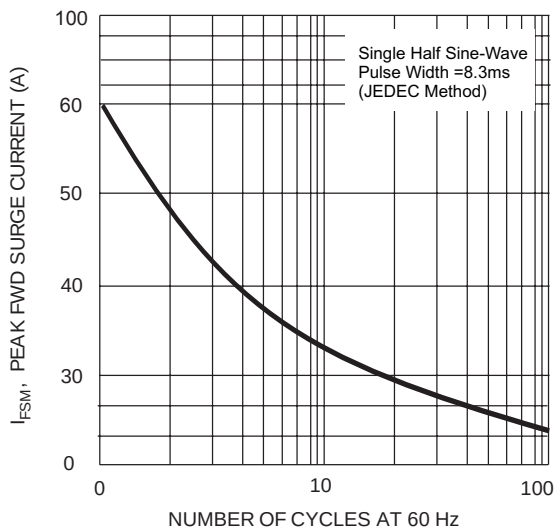
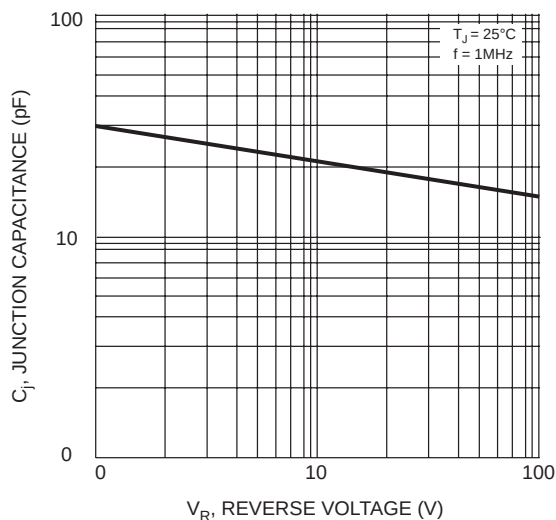


Fig. 4 Typical Junction Capacitance



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



www.microdiode.com