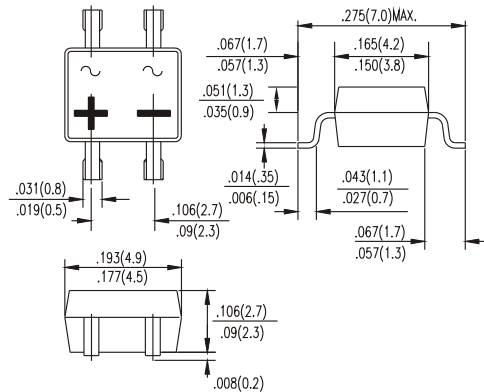
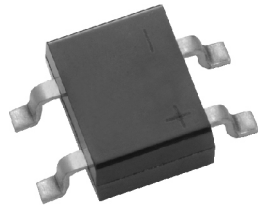


# KB12S thru KB18S

## SURFACE MOUNT SCHOTTKY BARRIER BRIDGE RECTIFIERS

VOLTAGE- 20 to 80 Volts CURRENT- 1.0 Amperes



### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classion 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier majority carrier conduction
- Low power loss.high efficiency
- High surge capacity
- High current capacity,low VF
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C /10 seconds at terminals
- Pb free product at av : 99% Sn above meet RoHS environment substnce directive request

### MECHANICAL DATA

- Terminas:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Standard packagng: 12mm tape (EIA-481)
- Weight : 0.008 ounce,0.22 gram.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load

	SYMBOLS	KB12S	KB14S	KB16S	KB18S	UNITS
Marking Code		KB12S	KB14S	KB16S	KB18S	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	40	60	80	V
Maximum RMS Voltage	VRMS	14	28	42	56	V
Maximum DC Blocking Voltage	VDC	20	40	60	80	V
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30.0				A
Maximum Instantaneous Forward Voltage at 1.0A (Note 1)	VF	0.50		0.70	0.85	V
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	IR		0.5			mA
Maximum Thermal Resistance(Note 2)	RθJL		28.0			°C/W
	RθJA		88.0			
Operating and Storage Temperature Range TJ	TJ		-50 to +150			°C
Storage Temperature Range	TSTG		-55 to +150			°C

NOTES:

A.Pulse Test with PW =300µsec, 2% Duty Cycle.

B.Mounted on P.C. Board with 5.0mm2 (.013mm thick) copper pad areas.

# KB12S thru KB18S

## SURFACE MOUNT SCHOTTKY BARRIER BRIDGE RECTIFIERS

### RATING AND CHARACTERISTIC CURVES

#### KB12S THRU KB18S

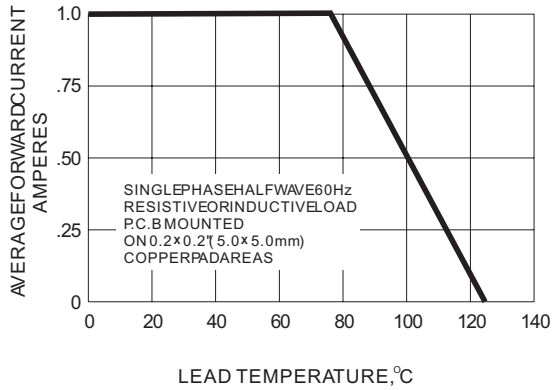


Fig. 1 - FORWARD CURRENT DERATING CURVE

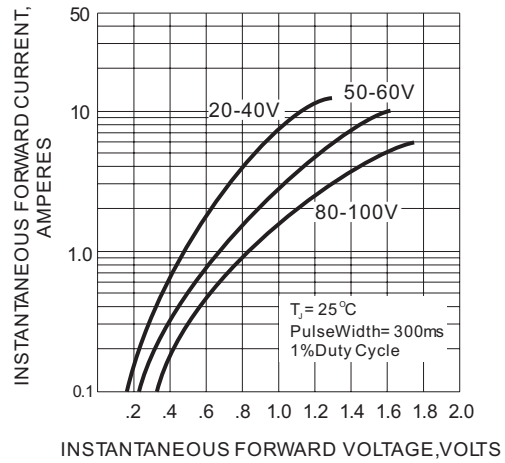


Fig. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

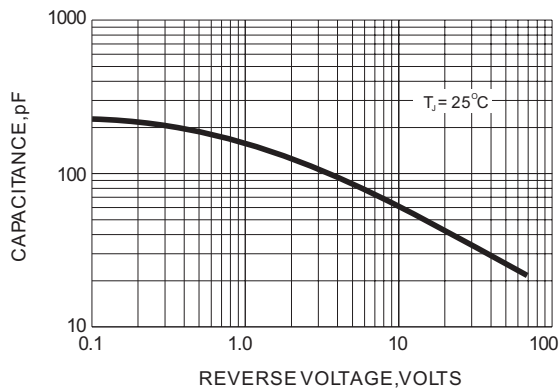


Fig. 3 - TYPICAL JUNCTION CAPACITANCE

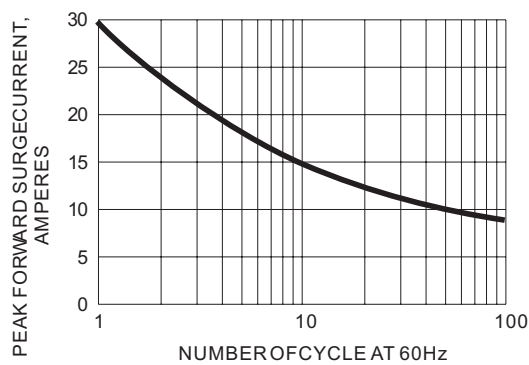


Fig. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT