



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**MBK22S
THRU
MBK220S**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

VOLTAGE RANGE - 20 to 200 Volts

CURRENT - 2.0 Amperes

FEATURES

- *High surge current capability
- * Ideal for printed circuit board

MECHANICAL DATA

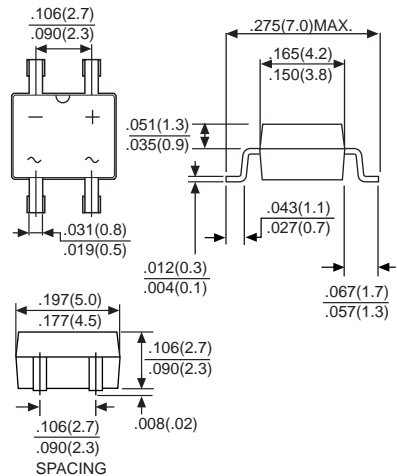
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.1 gram

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, derate current by 20%.



MBS



Dimensions in inches and (millimeters)

	SYMBOL	MBK22S	MBK24S	MBK26S	MBK28S	MBK210S	MBK215S	MBK220S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	150	200	Volts
Maximum Average Forward Output Current at T _A =75°C (Note 1)	I _O	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40			30				Amps
Maximum DC Forward Voltage Drop per Bridge Element at 2.0A DC	V _F	0.55		0.70	0.85		0.95		Volts
Maximum Reverse Current at rated DC Blocking Voltage per element	I _R	@ T _A = 25°C			0.3		0.2		mAmps
		@ T _A = 125°C			10				
Typical Junction Capacitance (Note 2)	C _J					220			pF
Typical Thermal Resistance (Note 3)	R _{θJA}					75			°C/W
Operating and Storage Temperature Range	T _{J,TSTG}					-50 to + 150			°C

- NOTES: 1. Mounted on P.C. board with 4x(5x5mm²) copper pad.
2. Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient.

RATING AND CHARACTERISTIC CURVES (MBK22S THRU MBK220S)

FIG. 1
MAXIMUM NON-REPETITIVE SURGE CURRENT

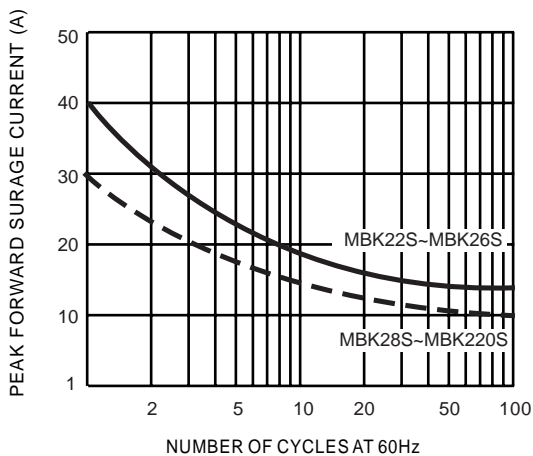


FIG. 2
DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

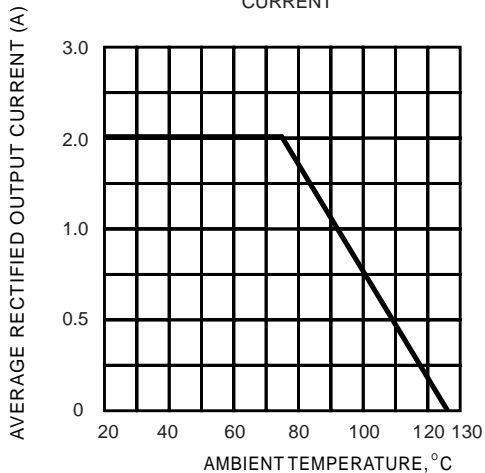


FIG. 3
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

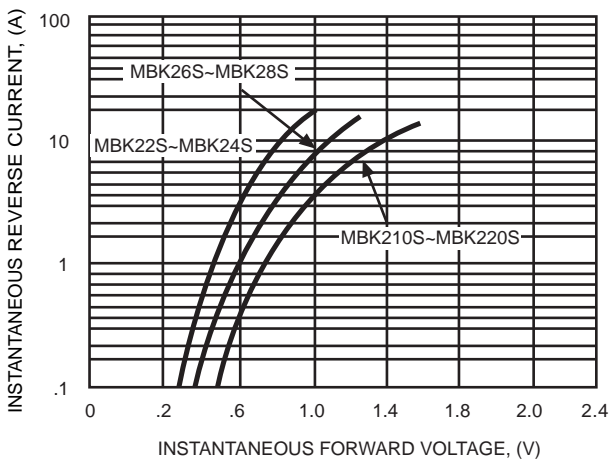
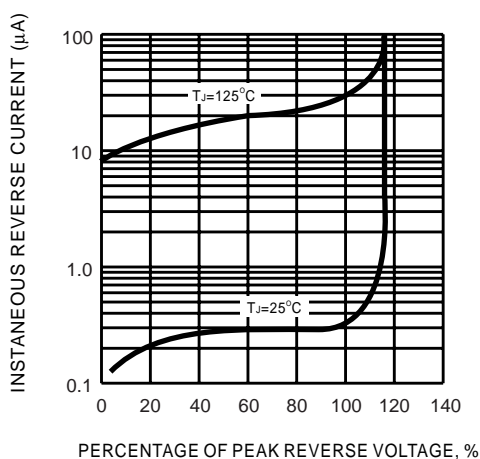


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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