



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

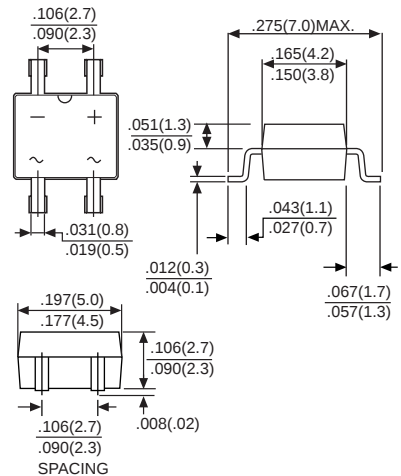
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.1 gram

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



		SYMBOL	MBK22S	MBK24S	MBK26S	MBK28S	MBK210S	MBK215S	MBK220S	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	40	60	80	100	150	200	Volts
Maximum RMS Bridge Input Voltage		VRMS	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage		VDC	20	40	60	80	100	150	200	Volts
Maximum Average Forward Output Current at TA=75°C (Note 1)		Io	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	40			30				Amps
Maximum DC Forward Voltage Drop per Bridge Element at 2.0A DC		VF	0.55		0.70	0.85		0.95		Volts
Maximum Reverse Current at rated DC Blocking Voltage per element	@ TA = 25°C	IR	0.3			0.2		0.1		mAmps
	@ TA = 125°C		10							
Typical Junction Capacitance (Note 2)		CJ	220							pF
Typical Thermal Resistance (Note 3)		RθJA	75							°C/W
Operating and Storage Temperature Range		TJ,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

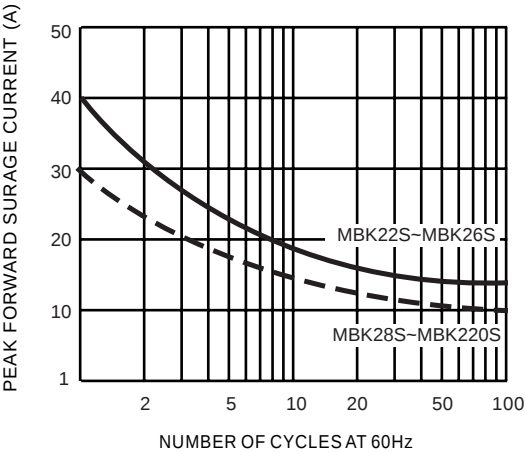


FIG. 2
DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

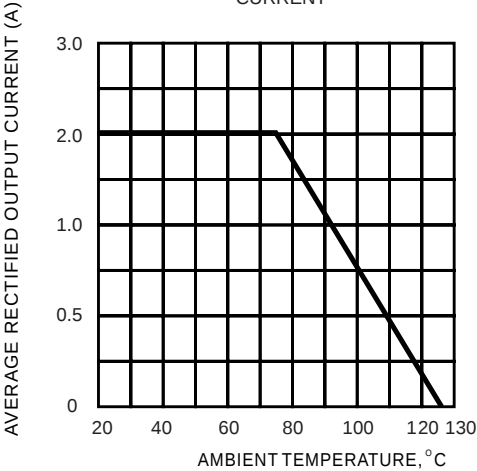


FIG. 3
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

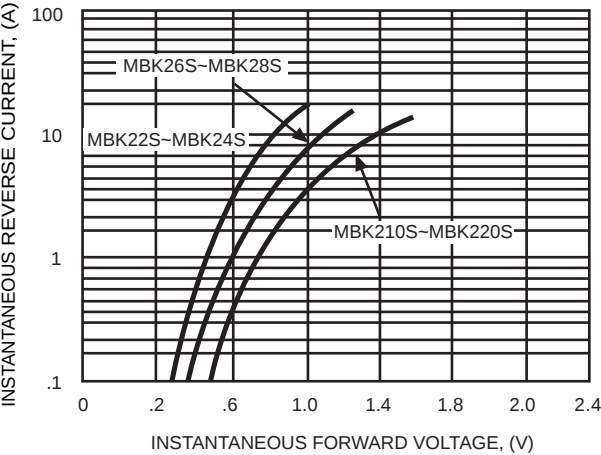
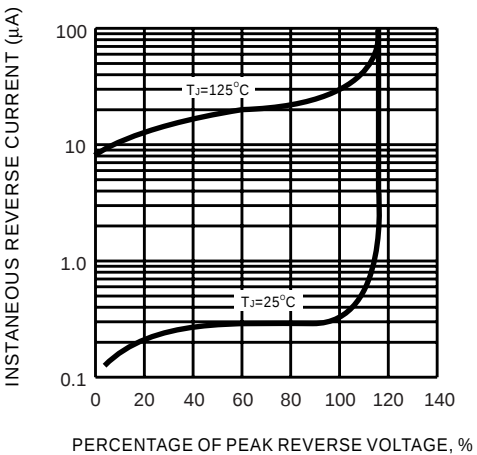


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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