

SCHOTTKY BARRIER BRIDGE RECTIFIER

VOLTAGE RANGE 80 TO 200 Volts CURRENT 2.0 Ampere

FEATURES

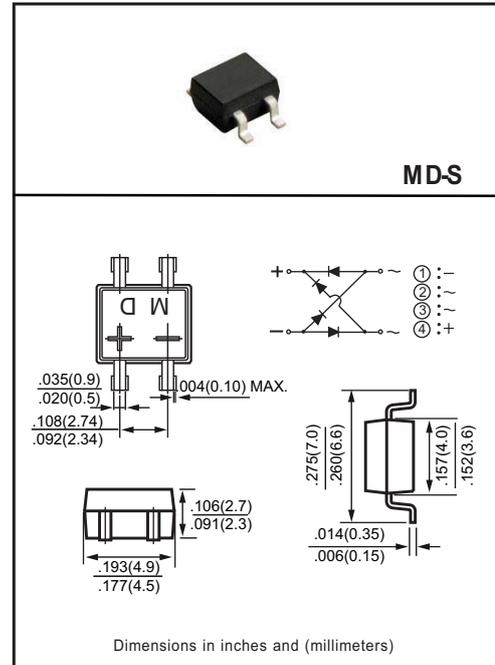
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.134 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	2KMD80S	2KMD100S	2KMD150S	2KMD200S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	I_O	2.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60				Amps
Typical Current Squared Time	i^2T	14.94				A ² S
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50				°C/W
	$R_{\theta JL}$	15				
Typical Junction Capacitance (Note 3)	C_J	110				pF
Operating Temperature Range	T_J	150				°C
Storage Temperature Range	T_{STG}	-55 to + 150				°C

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	2KMD80S THRU 2KMD200S	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	V_F	0.85	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	200	uA
	@ $T_A = 100^\circ\text{C}$	2	
			mA

- NOTES : 1. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (2KMD80S THRU 2KMD200S)

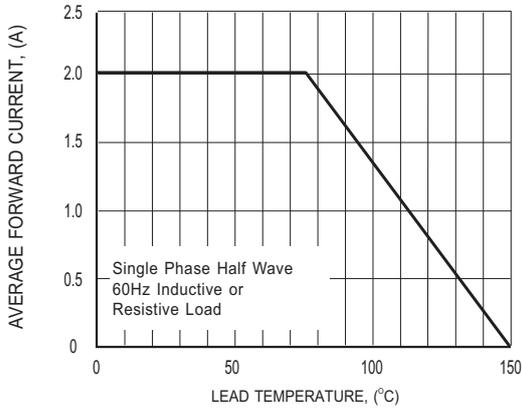


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

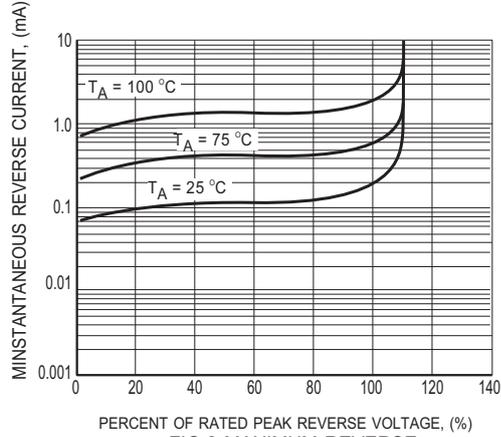


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

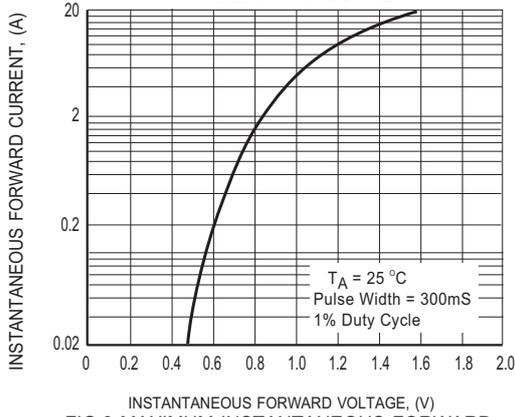


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

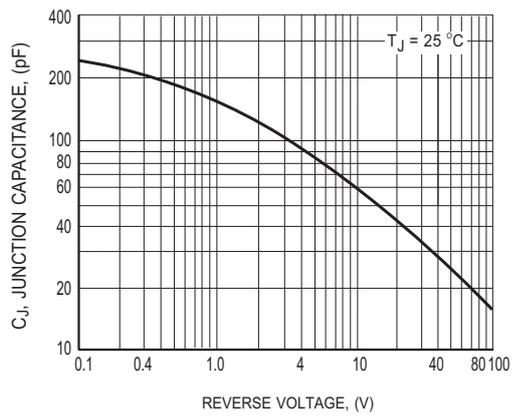


FIG.4 TYPICAL JUNCTION CAPACITANCE

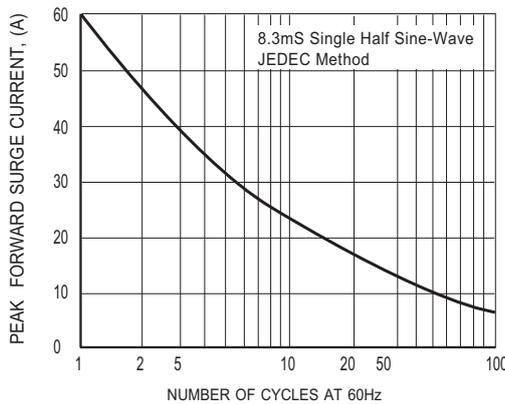
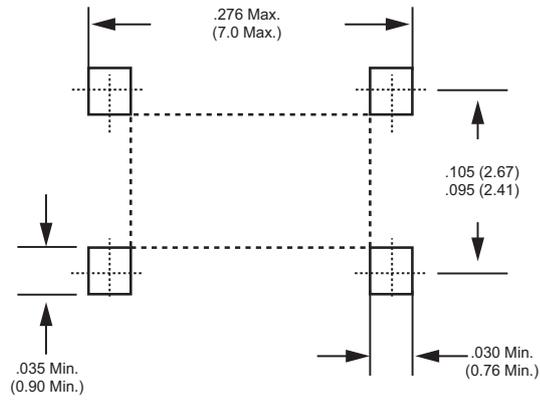


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MD-S	-T	500	2,000	---	---	178	390*205*310	16,000	---
MD-S	-W	3,000	6,000	---	---	330	360*355*360	48,000	15.50

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