

**SCHOTTKY BARRIER BRIDGE RECTIFIER**

**VOLTAGE RANGE 20 TO 60 Volts CURRENT 2.0 Ampere**

**FEATURES**

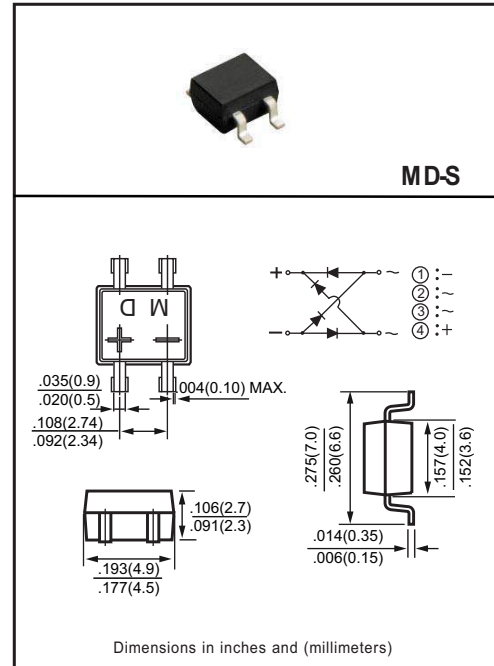
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

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

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



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

RATINGS	SYMBOL	2KMD20S	2KMD30S	2KMD40S	2KMD50S	2KMD60S	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	Volts	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	Volts	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	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 <sup>2</sup> 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	$T_J$	-55 to + 150						°C
Storage Temperature Range	$T_{STG}$	-55 to + 150						°C

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

CHARACTERISTICS	SYMBOL	2KMD20S	2KMD30S	2KMD40S	2KMD50S	2KMD60S	UNITS	
Maximum Instantaneous Forward Voltage at 2.0 A DC	$V_F$	0.55				0.60		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ C$		200			uA	
		@ $T_A = 150^\circ C$		10			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. "ROHS compliant".

# RATING AND CHARACTERISTICS CURVES ( 2KMD20S THRU 2KMD60S )

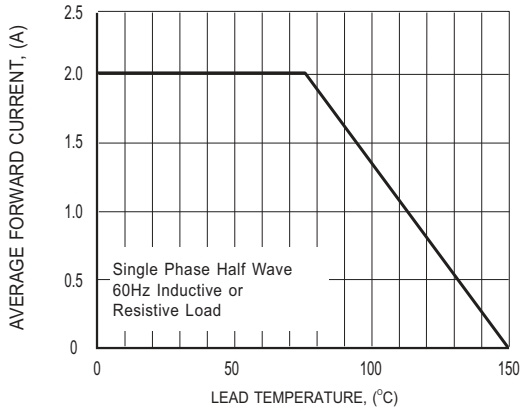


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

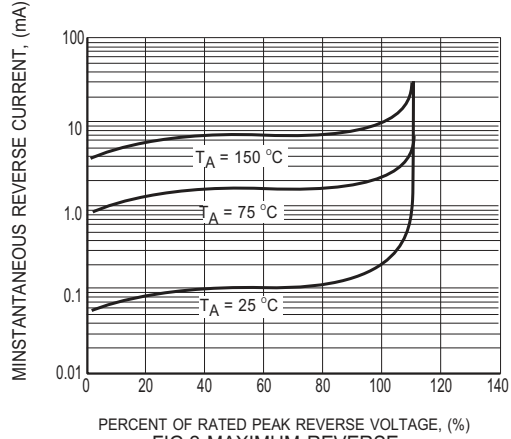


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

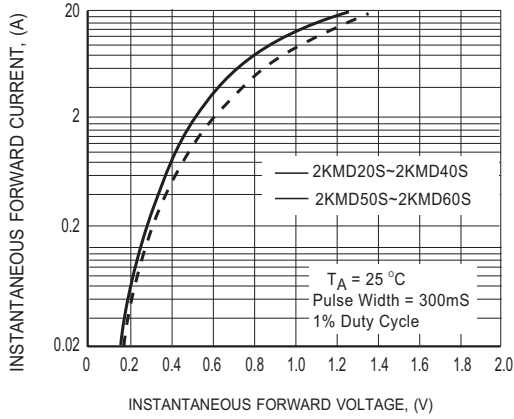


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

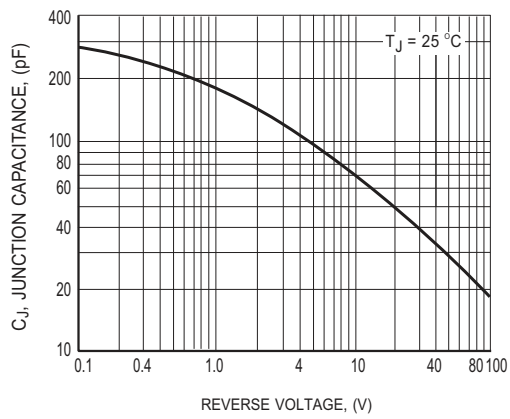


FIG.4 TYPICAL JUNCTION CAPACITANCE

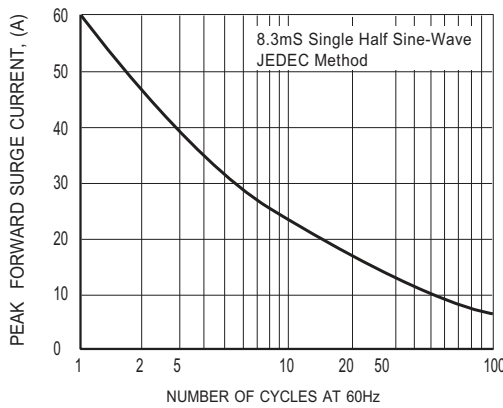
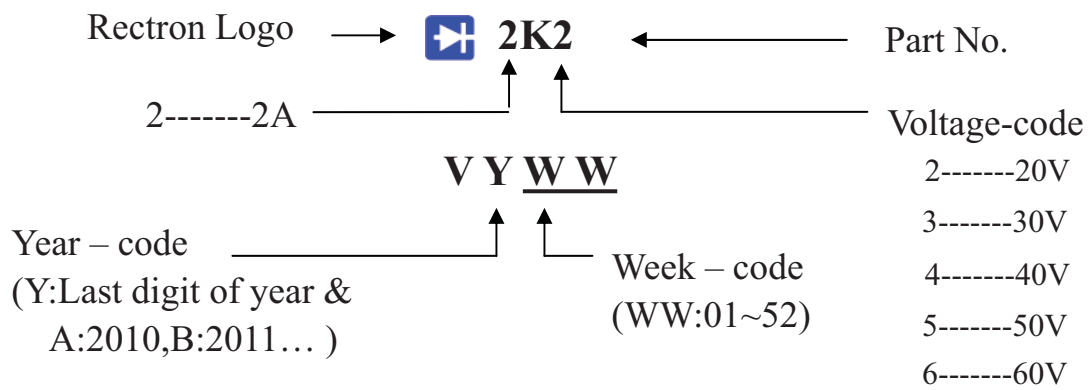
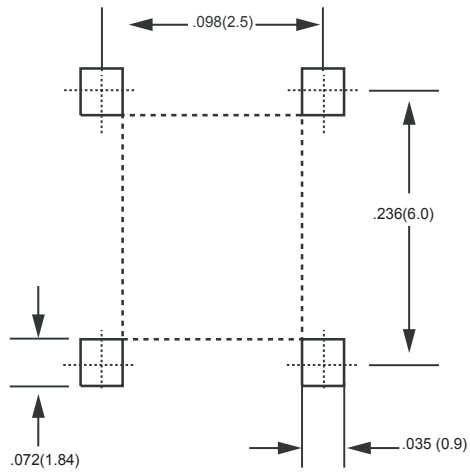


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

## Marking Description



## 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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