



**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**

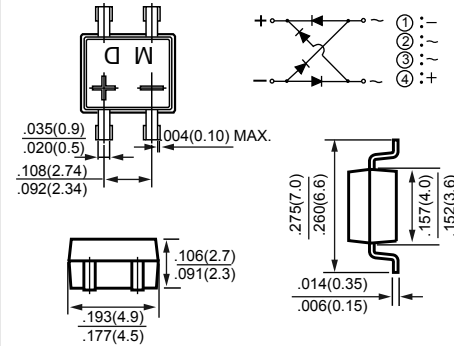
- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.134 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



**MDS**



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

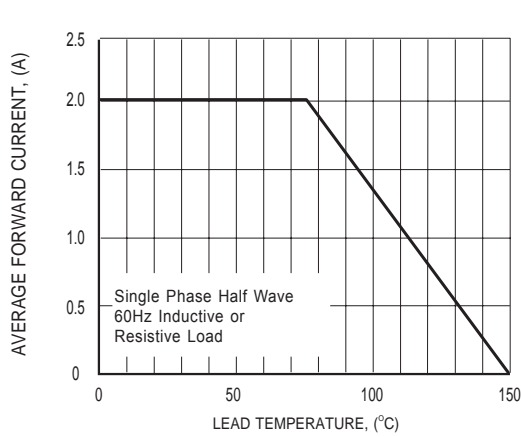
RATINGS	SYMBOL	2KMD20S	2KMD30S	2KMD40S	2KMD50S	2KMD60S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	$I_O$	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 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)**

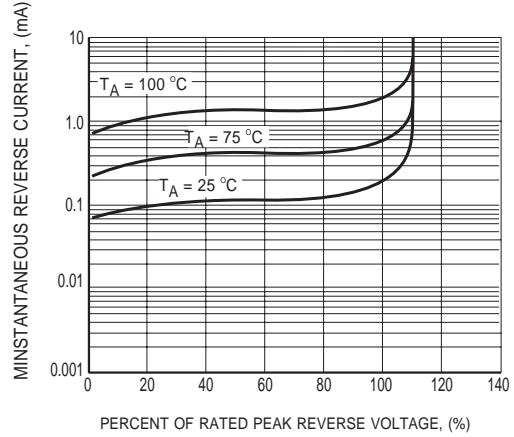
CHARACTERISTICS	SYMBOL	2KMD20S THRU 2KMD40S	2KMD50S THRU 2KMD60S	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	$V_F$	0.55	0.70	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ\text{C}$	200	uA
		@ $T_A = 100^\circ\text{C}$	2	mA

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)".

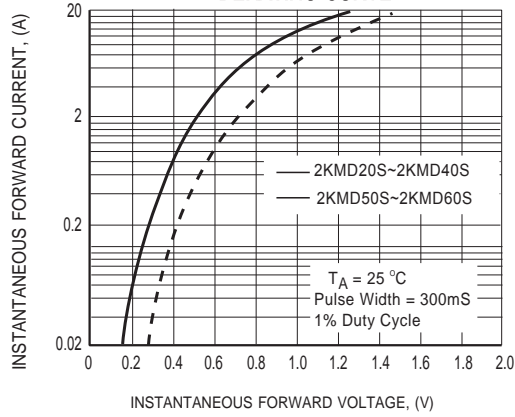
## RATING AND CHARACTERISTICS CURVES ( 2KMD20S THRU 2KMD60S )



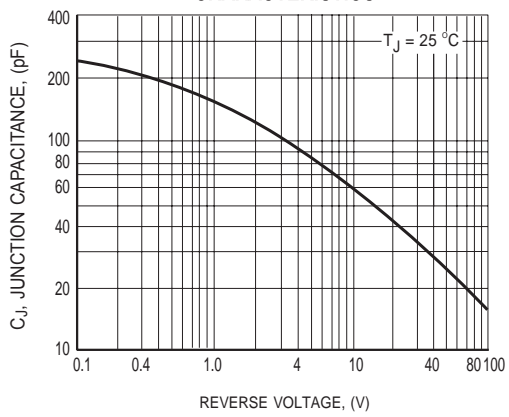
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



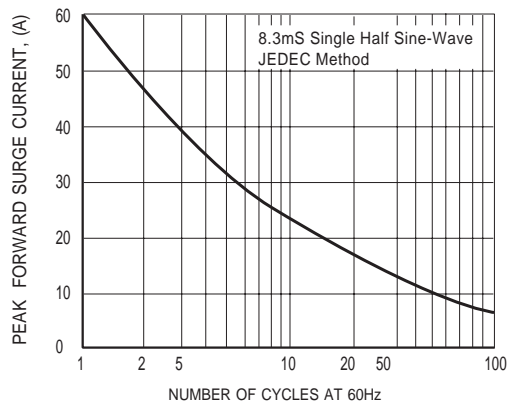
**FIG.2 TYPICAL REVERSE CHARACTERISTICS**



**FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

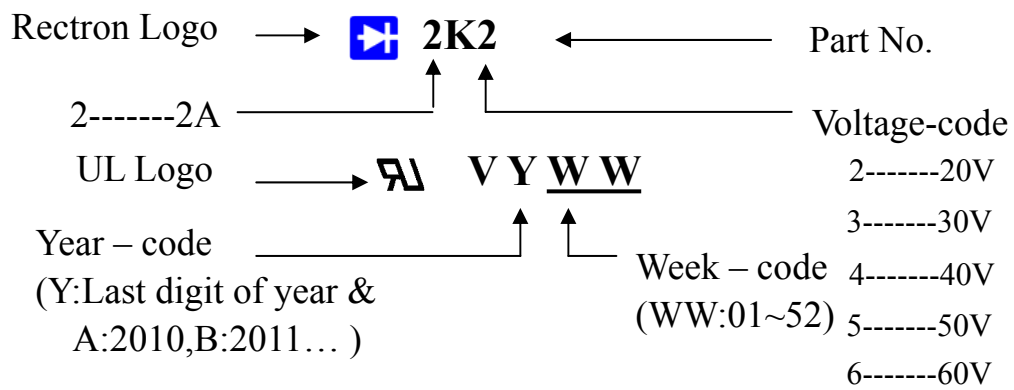


**FIG.4 TYPICAL JUNCTION CAPACITANCE**



**FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## Marking Description



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