



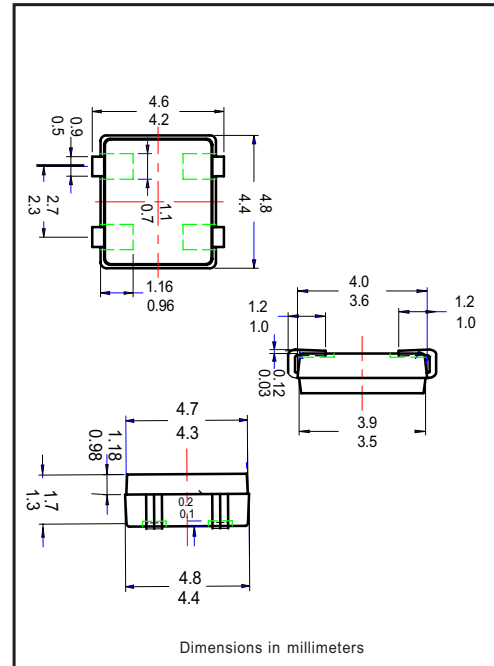
SCHOTTKY BARRIER BRIDGE RECTIFIER
VOLTAGE RANGE 20 TO 60 Volts CURRENT 1.0 Ampere

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	KMD20SJ	KMD30SJ	KMD40SJ	KMD50SJ	KMD60SJ	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	1.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40					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	KMD20SJ THRU KMD40SJ	KMD50SJ THRU KMD60SJ	UNITS
Maximum Instantaneous Forward Voltage at 1.0 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 (KMD20SJ THRU KMD60SJ)

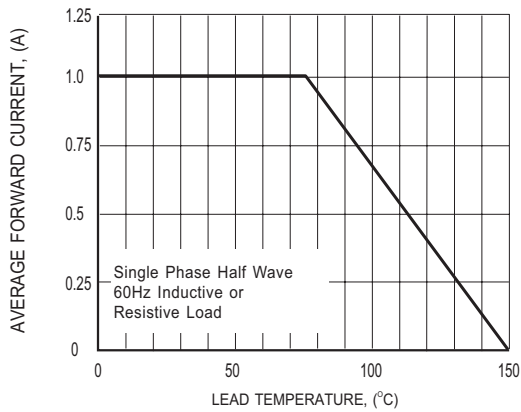


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

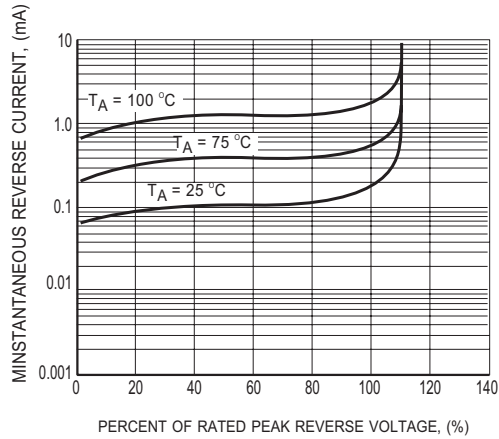


FIG.2 TYPICAL REVERSE CHARACTERISTICS

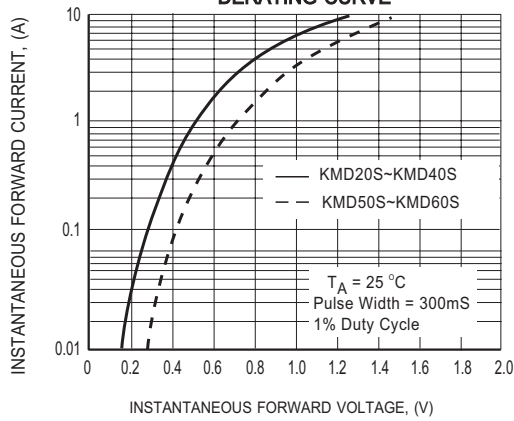


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

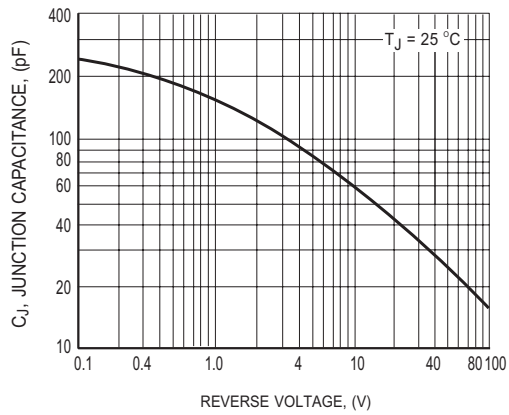


FIG.4 TYPICAL JUNCTION CAPACITANCE

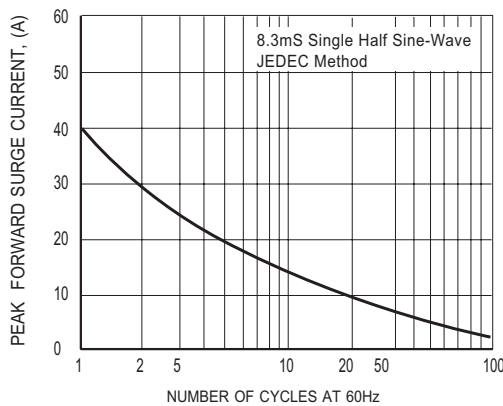
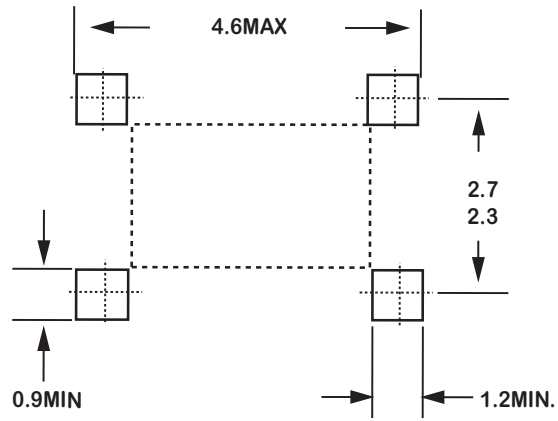


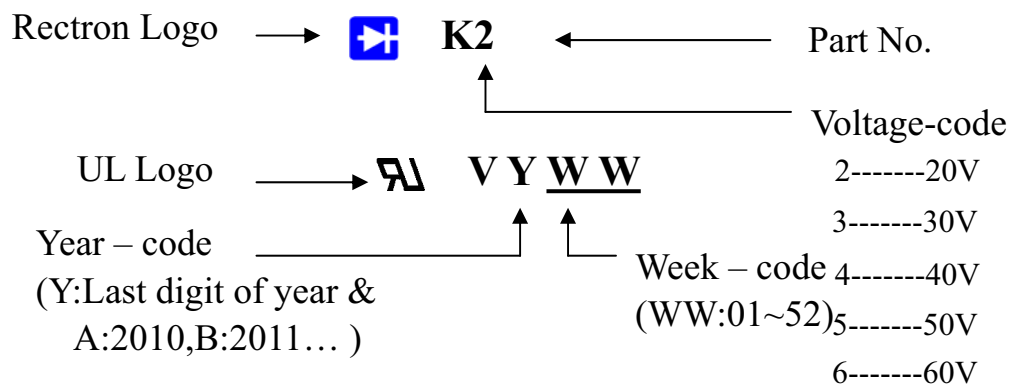
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in millimeters

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MDSJ	-T	500	---	---	178	390*205*310	16,000	---
MDSJ	-W	3,000	---	---	330	355*360*350	48,000	15.50

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