RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

2KMD40S

SCHOTTKY BARRIER BRIDGE RECTIFIER

VOLTAGE 40 Volts CURRENT 2.0 Ampere

FEATURES

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

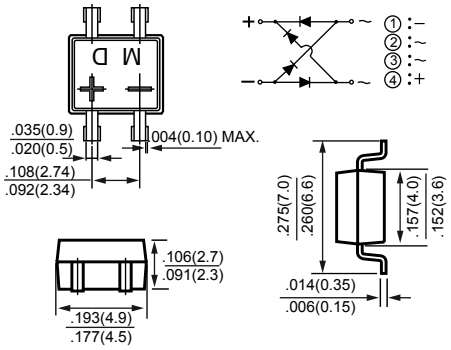
MECHANICAL DATA

* Case: Molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* 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.

MD-S



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	2KMD40S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum DC Blocking Voltage	V_{DC}	40	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	2KMD40S	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC		V_F	0.5	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	50	uA
at Rated DC Blocking Voltage	@T_A = 100°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)".

2012-02
REV:O

RATING AND CHARACTERISTICS CURVES (2KMD40S)

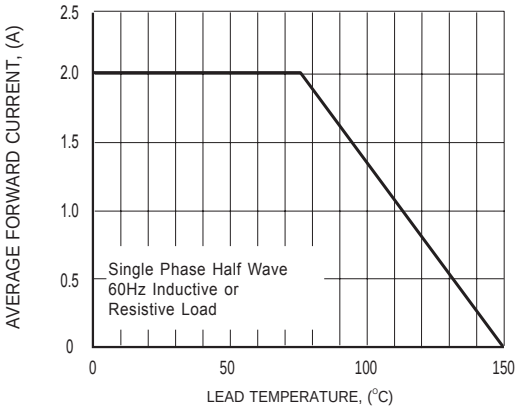


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

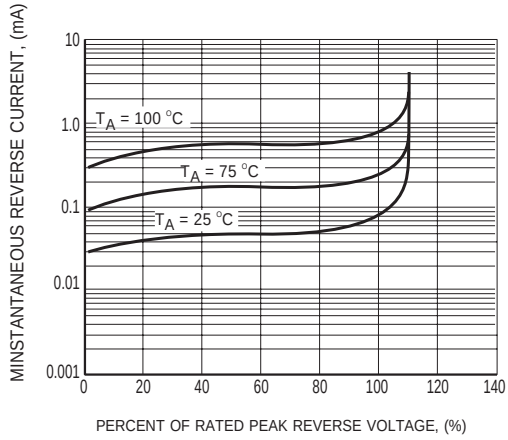


FIG.2 TYPICAL REVERSE CHARACTERISTICS

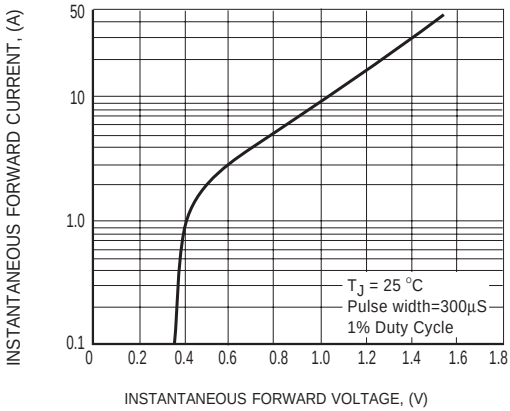


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

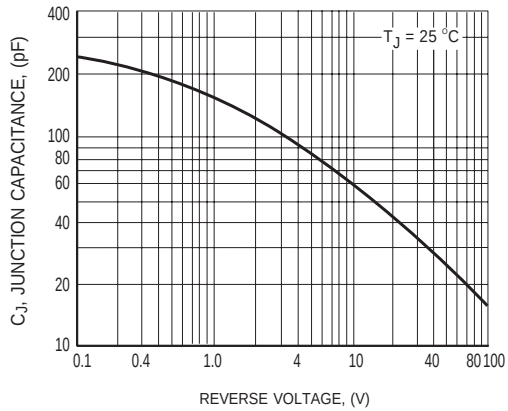


FIG.4 TYPICAL JUNCTION CAPACITANCE

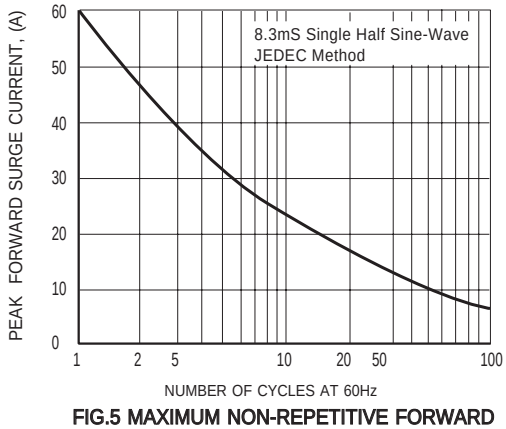
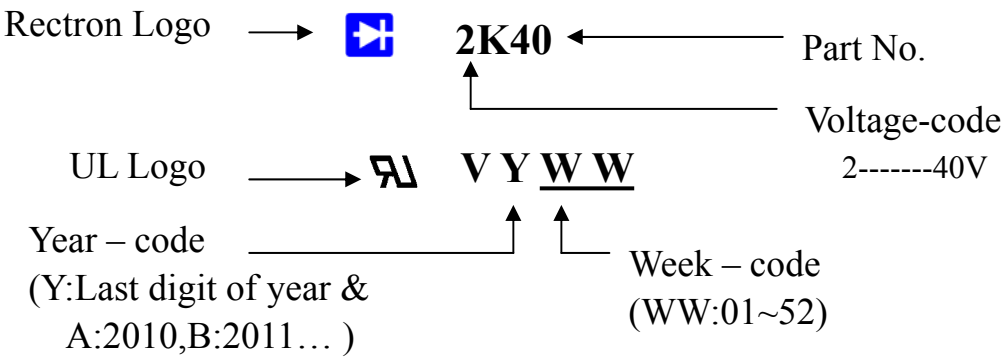


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Marking Description



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