RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

MURS320
MURS340
MURS360

ULTRAFAST RECTIFIER

VOLTAGE RANGE 200 to 600 Volts CURRENT 3.0 Amperes

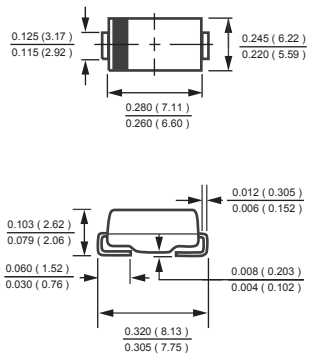
FEATURES
* High reliability
* Low leakage
* Low forward voltage
* High current capability
* Ultrafast switching speed
* High surge capability
* Good for switching mode circuit

MECHANICAL DATA
* Case: Molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 0.24 gram

Preliminary

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

DO-214AB



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	MURS320	MURS340	MURS360	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	140	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	200	400	600	Volts
Maximum Average Forward Rectified Current at T_A=55°C	I_O	3.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	75			Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150			°C

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

CHARACTERISTICS		SYMBOL	MURS320	MURS340	MURS360	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	0.875	1.25		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_J = 25°C	I_R	5	10		uAmps
	@T_J = 150°C		150	250		
Maximum Reverse Recovery Time (Note 1)		trr	25	50		nSec

NOTES : 1. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A
2. "Fully ROHS complaint", "100% Sn plating (Pb-free)"

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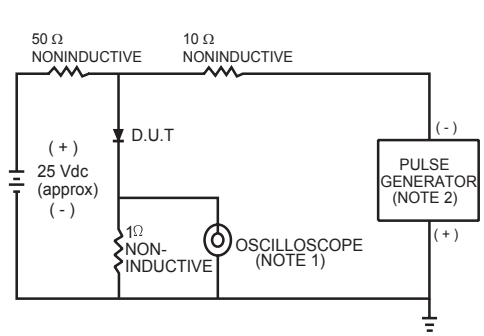
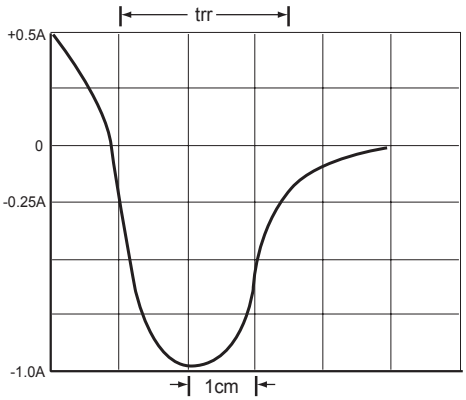
RATING AND CHARACTERISTICS CURVES (MURS320 THRU MURS360)



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.

2. Rise Time = 10ns max. Source Impedance = 50 ohms.



SET TIME BASE FOR 15/1 ns/cm

FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

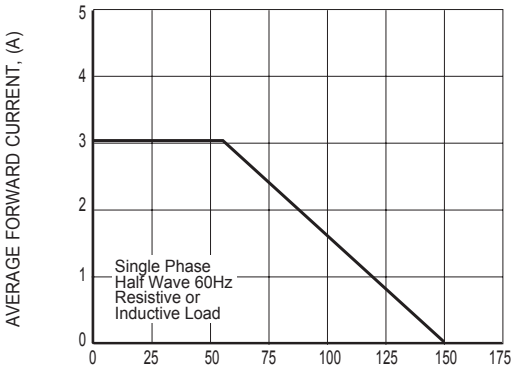


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

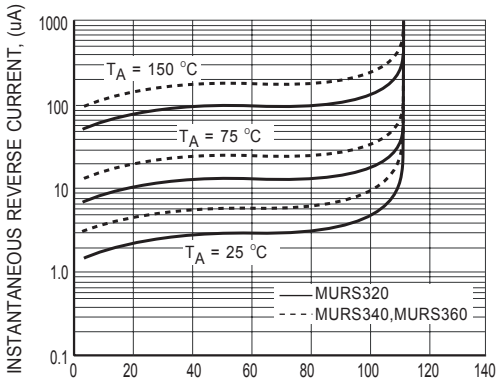


FIG.3 TYPICAL REVERSE CHARACTERISTICS

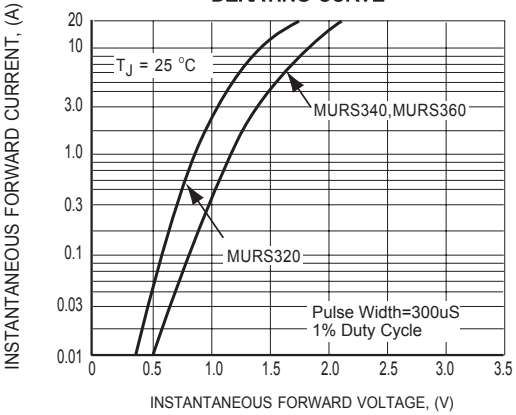


FIG.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

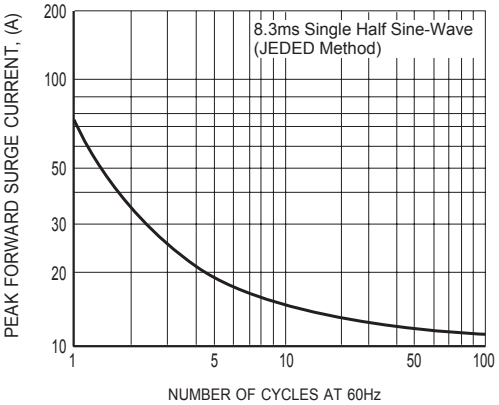
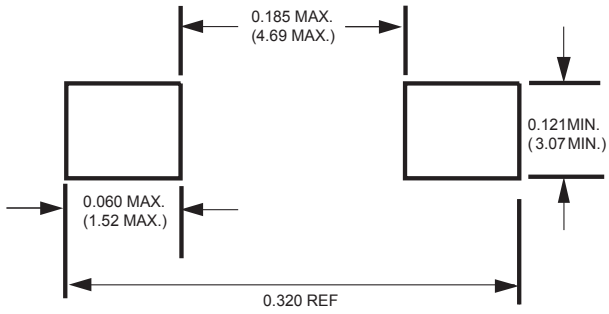


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

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