



## SILICON RECTIFIER

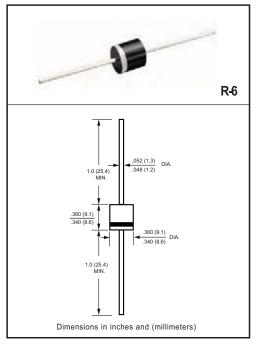


#### FEATURES

- \* High surge current capability
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* Low lost

#### **MECHANICAL DATA**

- \* Case: Molded plastic black body
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 2.08 gram



#### 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%.

RATINGS	SYMBOL	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1000							Volts
Maximum RMS Voltage	V <sub>RMS</sub>	700							Volts
Maximum DC Blocking Voltage	VDC		1000						Volts
Maximum Average Forward Rectified Current at TA = 50°C	Ι <sub>Ο</sub>		10						Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	400						Amps	
Typical Current Squared Time	I <sup>2</sup> T	664						A <sup>2</sup> S	
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	20						° C/W	
Typical Thermal Resistance (Note 4)	$R_{\theta JL}$	4						°C/W	
Typical Thermal Resistance (Note 5)	$R_{\theta JC}$	6						°C/W	
Typical Junction Capacitance (Note 1)	CJ	135						pF	
Operating and Storage Temperature Range	Tj, T <sub>STG</sub>	-55 to + 150						٥C	

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

CHARACTERISTICS	SYMBOL	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS	
Maximum Forward Voltage at 10A DC	VF	1.1							Volts	
Maximum DC Average Reverse Current at	@T <sub>A</sub> = 25°C					5				uAmps
Rated DC Blocking Voltage	@T <sub>A</sub> = 150°C	IR	2							mAmps
Maximum Full Load Reverse Current Average .375" (9.5mm) Lead Length at TL=75°C	'K				50				uAmps	

NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC

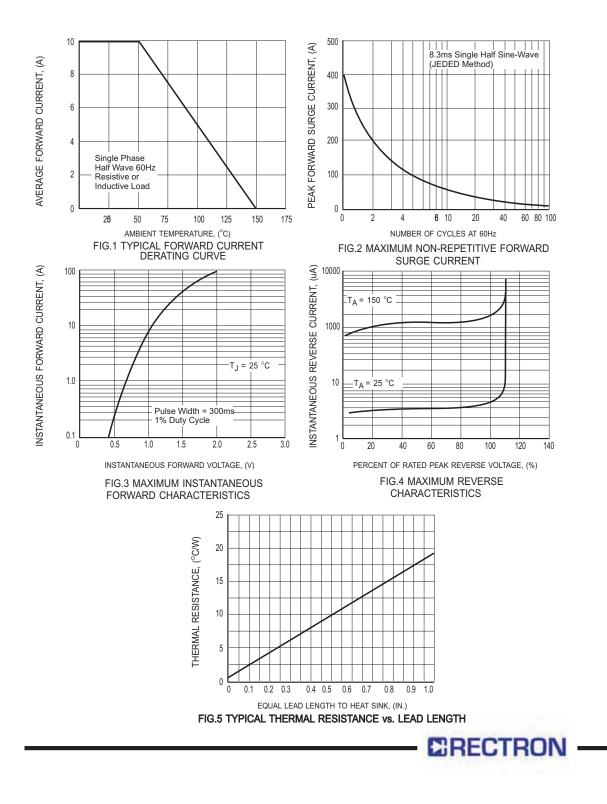
2. " ROHS compliant".

3. Thernal Resistance: At 9.5mm lead lengths, PCB mounted.

4. Thernal Resistance Junction to lead

5. Thernal Resistance Junction to dice

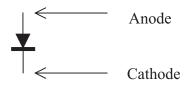
2019-02 REV:B



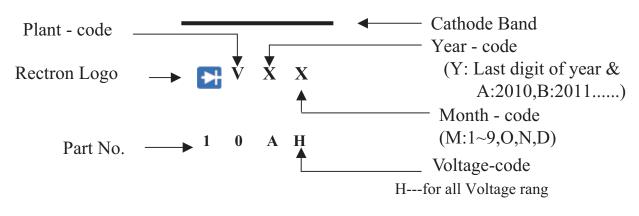


# **Attachment information about 10AX**

# 1. Internal Circuit



# 2. Marking on the body



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
R-6/R-7	-В	200	300*73*40	347*320*271	4,800	12.93/14.57

### 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)
R-6/R-7	-T	800	800	9.5	52	330	355*350*335	3,200	9.72/9.91

### AMMO PACK

PACKAGE	PACKING	REEL	COMPONENT	TAPE SPACE	BOX SIZE	CARTON	CARTON	GROSS
	CODE	( EA )	SPACE(mm)	(mm)	(mm)	SIZE(mm)	(EA)	WEIGHT (Kg)
R-6/R-7	-F	300	9.5	52	255*73*100	400*268*225	3,000	8.5/8.7



## **DISCLAIMER NOTICE**

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

