

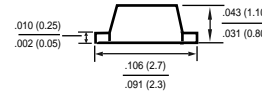
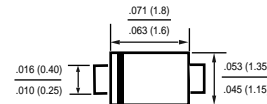
FAST SWITCHING DIODE
VOLTAGE 80 Volts CURRENT 150 mAmperes

FEATURES

- * Flat Lead SOD-323 Small Outline Plastic Package
- * Surface Device Type Mounting
- * Fast Switching Device ($T_{rr} < 4.0nS$)
- * Moisture Sensitivity Level 1
- * General Purpose Diodes
- * Clip Bonding Construction, Good Thermal Capability
- * Pb Free Version and ROHS Compliant
- * Matte Tin(Sn) Lead Finish with Nicke(Ni) Underplate
- * Band Indicates Cathode



SOD-323



Dimensions in inches and (millimeters)

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%.

Absolute Maximum Ratings (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	1SS355	UNITS
Reverse Voltage	V_R	80	Volts
Repetitive Peak Reverse Voltage	V_{RM}	90	Volts
Continuous Forward Current	I_O	150	mAmps
Forward Current	I_{FM}	0.25	Amps
Repetitive Peak Forward Current	I_{FRM}	0.5	Amps
Power Dissipation	P_D	200	mW
Operating Junction Temperature	T_J	+150	°C
Storage Temperature Range	T_{STG}	-65 to + 150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

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

CHARACTERISTICS	SYMBOL	1SS355		UNITS
		Min.	Max.	
Forward Voltage @IF=100mA	V_F		1.2	Volts
Reverse Leakage Current @VR=80V	I_R		100	nAmps
Breakdown Voltage @IR=100uA	V_R	80		Volts
Reverse Recovery Time (IF=10mA, VR=6V, RL=100W)	T_{rr}		4	nS
Capacitance (VR=0.5V, f=1MHz)	C		4	pF

RATING AND CHARACTERISTICS CURVES (1SS355)

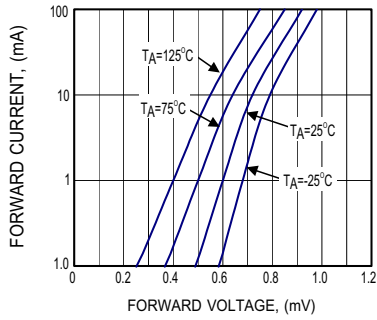


FIG.1 V_F - I_F CHARACTERISTICS

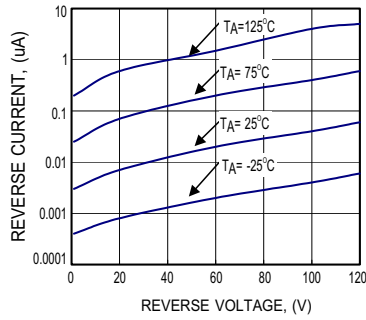


FIG.2 V_R - I_R CHARACTERISTICS

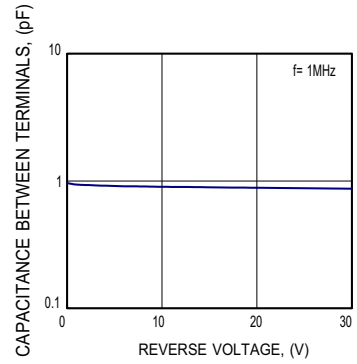


FIG.3 V_R - C_t CHARACTERISTICS

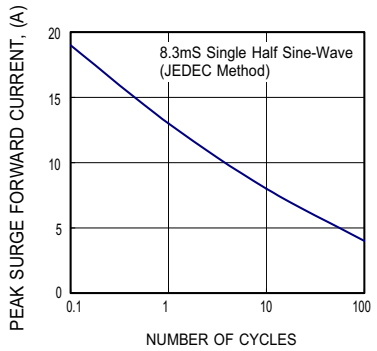


FIG.4 I_{FSM} -CYCLE CHARACTERISTICS

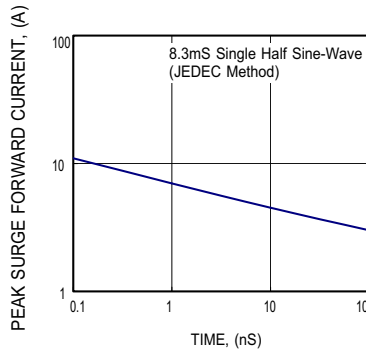


FIG.5 I_{FSM} - t CHARACTERISTICS

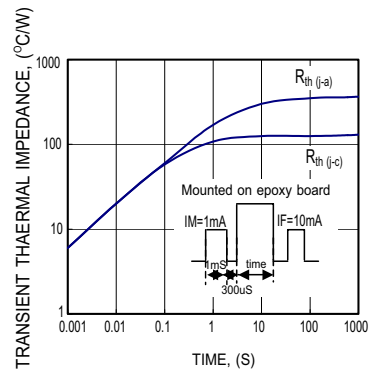


FIG.6 R_{th} - t CHARACTERISTICS

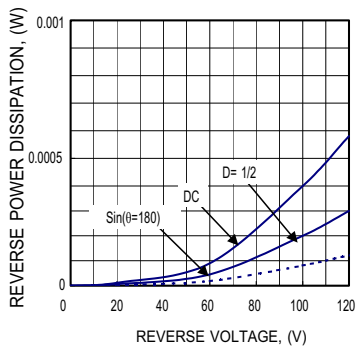


FIG.7 V_R - P_R CHARACTERISTICS

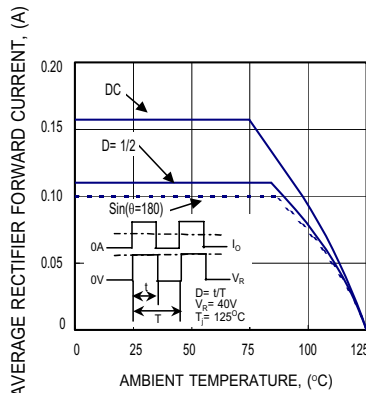


FIG.8 I_O - T_A CHARACTERISTICS

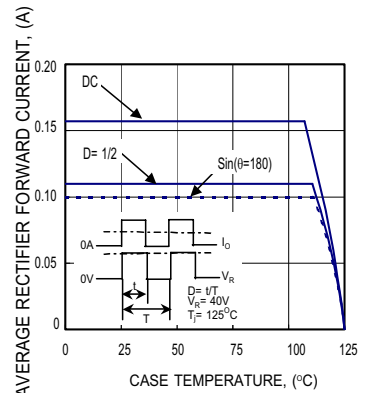


FIG.9 I_O - T_C CHARACTERISTICS

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.