

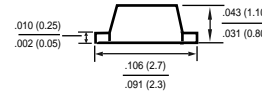
FAST SWITCHING DIODE
VOLTAGE 80 Volts CURRENT 150 mAmperes

FEATURES

- * Flat Lead SOD-323 Small Outline Plastic Package
- * Surface Device Type Mounting
- * Fast Switching Device ($T_{rr} < 4.0\text{nS}$)
- * 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 Nickel(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)

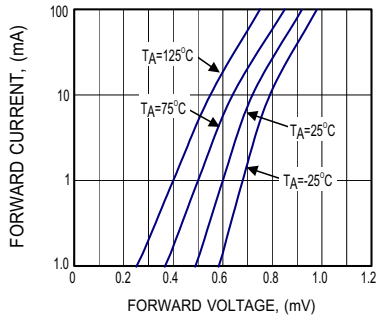


FIG.1 V_F-I_F CHARACTERISTICS

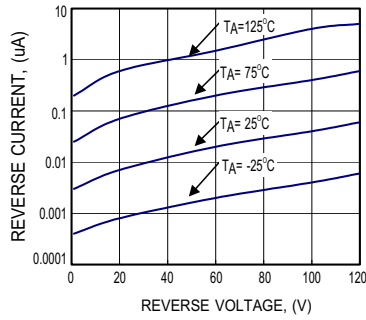


FIG.2 V_R-I_R CHARACTERISTICS

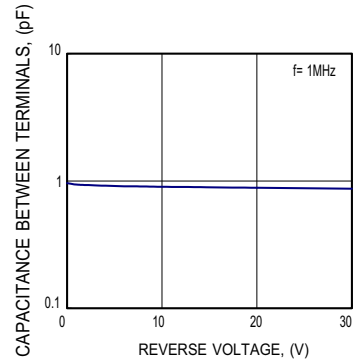


FIG.3 V_R-C_t CHARACTERISTICS

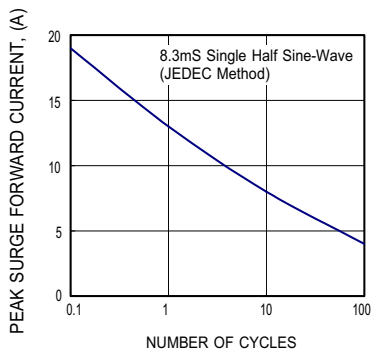


FIG.4 I_{FSM} -CYCLE CHARACTERISTICS

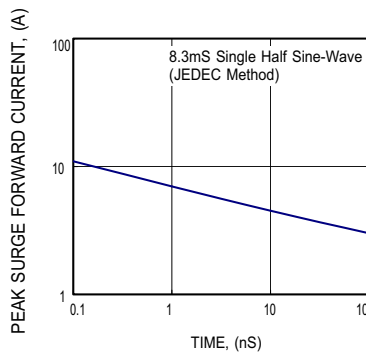


FIG.5 I_{FSM} -t CHARACTERISTICS

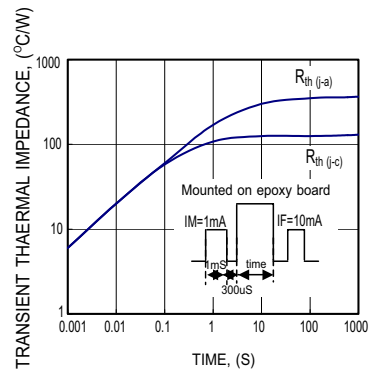


FIG.6 R_{th} -t CHARACTERISTICS

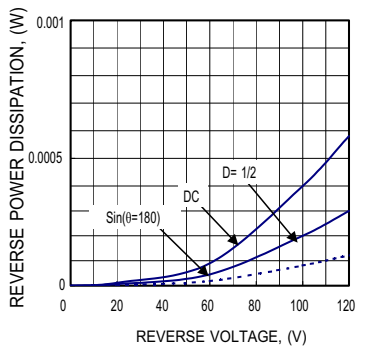


FIG.7 V_R-P_R CHARACTERISTICS

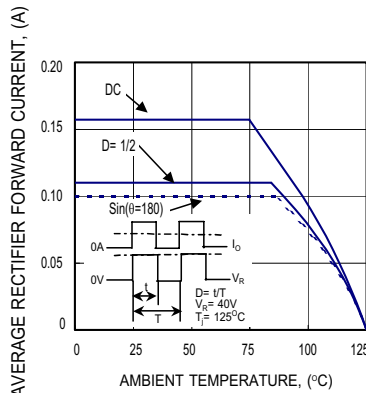


FIG.8 I_O-T_A CHARACTERISTICS

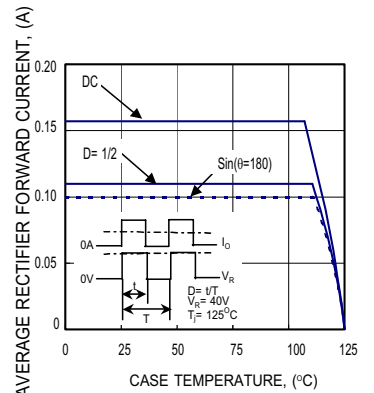


FIG.9 I_O-T_C CHARACTERISTICS

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