

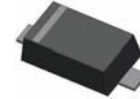
FAST SWITCHING DIODE
VOLTAGE 80 Volts CURRENT 150 mAmperes

FEATURES

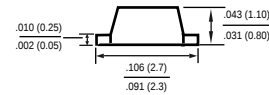
- * Flat Lead SOD-323 Small Outline Plastic Package
- * Surface Device Type Mounting
- * Fast Switching Device ($T_{rr} < 4.0\text{ns}$)
- * Moisture Sensitivity Level 1
- * General Purpose Diodes
- * Clip Bonding Construction, Good Thermal Capability
- * Pb Free Version and ROHS Compliant
- * Matte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

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%.



SOD-323



Dimensions in inches and (millimeters)

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	@ $I_F=100\text{mA}$	V_F		1.2	Volts
Reverse Leakage Current	@ $V_R=80\text{V}$	I_R		100	nAmps
Breakdown Voltage	@ $I_R=100\mu\text{A}$	V_R	80		Volts
Reverse Recovery Time ($I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$)		T_{rr}		4	nS
Capacitance ($V_R=0.5\text{V}, f=1\text{MHz}$)		C		4	pF

RATING AND CHARACTERISTICS CURVES (1SS355)

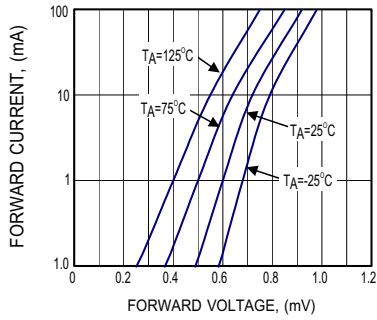


FIG.1 V_F - I_F CHARACTERISTICS

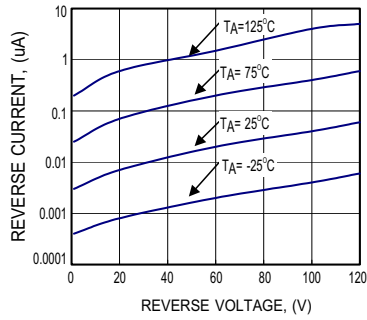


FIG.2 V_R - I_R CHARACTERISTICS

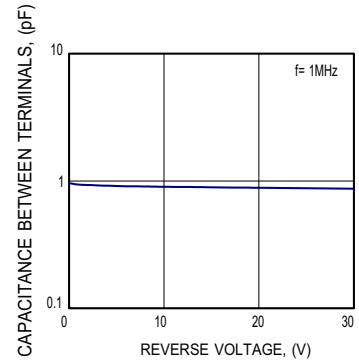


FIG.3 V_R - C_t CHARACTERISTICS

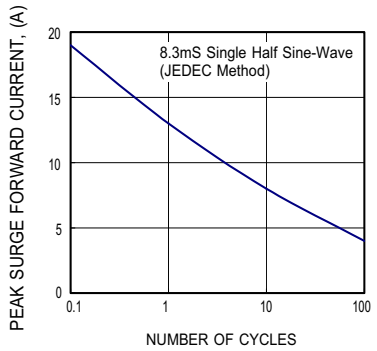


FIG.4 I_{FSM} -CYCLE CHARACTERISTICS

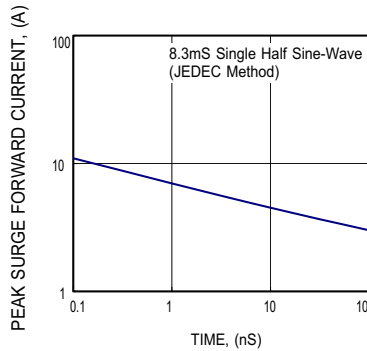


FIG.5 I_{FSM} - t CHARACTERISTICS

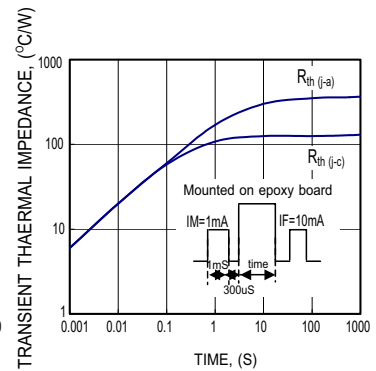


FIG.6 R_{th} - t CHARACTERISTICS

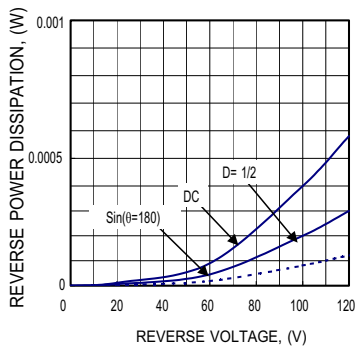


FIG.7 V_R - P_R CHARACTERISTICS

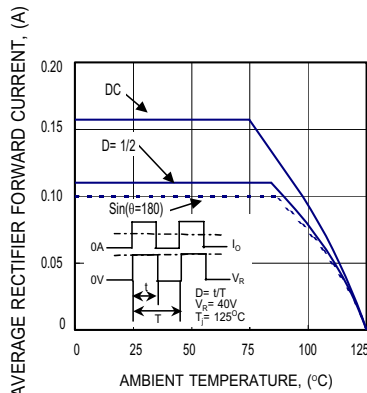


FIG.8 I_O - T_A CHARACTERISTICS

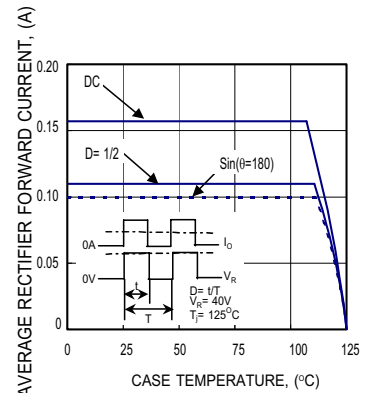


FIG.9 I_O - T_C CHARACTERISTICS

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