

HIGH SPEED SWITCHING DIODES

VOLTAGE 90 Volts CURRENT 150 mAmpere

FEATURES

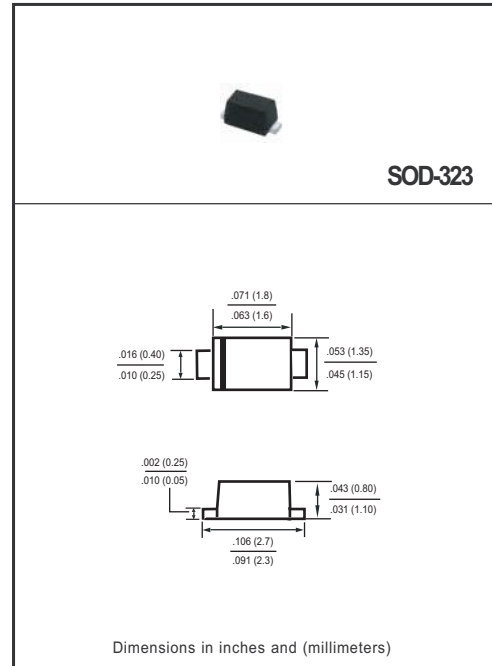
- * High Speed Switching Device ($T_{RR} < 4.0nS$)
- * General Purpose Diodes
- * Flat Lead SOD-323 Small Outline Plastic Package
- * Surface Device Type Mounting
- * Moisture Sensitivity Level 1
- * Clip Bonding Construction, Good Thermal Capability
- * Pb Free Version and RoHS Compliant
- * Matte Tin(Sn)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

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

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%.



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

RATINGS	SYMBOL	1SS355	UNITS
Reverse Voltage	V _R	80	V
Repetitive Peal Reverse Voltage	V _{RM}	90	V
Forward Current	I _F	250	mA
Continuous Forward Current	I _O	150	mA
Repetitive Peak Forward Current	I _{FRM}	500	mA
Reverse Recovery Time (I _F = 10mA, V _R = 6V, R _L =100Ω)	T _{RR}	4	nS
Capacitance (V _R = 0.5V, f= 1MHz)	C	4	pF
Storage Temperature Range	T _{stg}	-65 to +150	°C
Operating Junction Temperature	T _j	+150	°C

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

RATINGS	SYMBOL	MIN.	MAX.	UNITS
Breakdown voltage(I _R =100μA)	V _B	80	-	V
Forward Voltage(I _F =100mA)	V _F	-	1.2	V
Reverse Leakage Current (V _R =80V)	I _R	-	100	mA

RATING AND CHARACTERISTICS CURVES (1SS355)

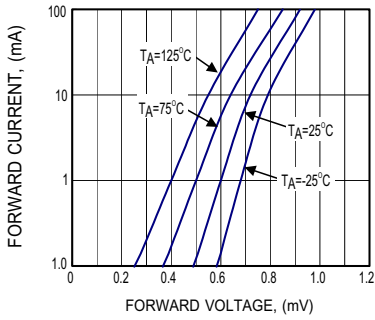


FIG.1 V_F - I_F CHARACTERISTICS

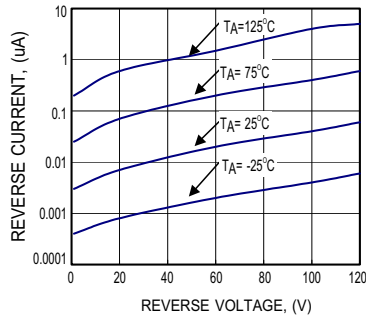


FIG.2 V_R - I_R CHARACTERISTICS

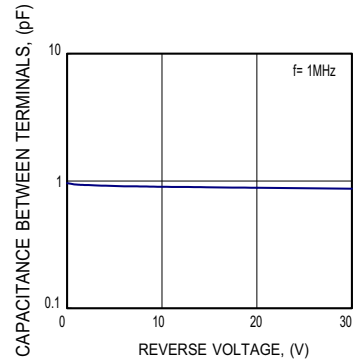


FIG.3 V_R - C_t CHARACTERISTICS

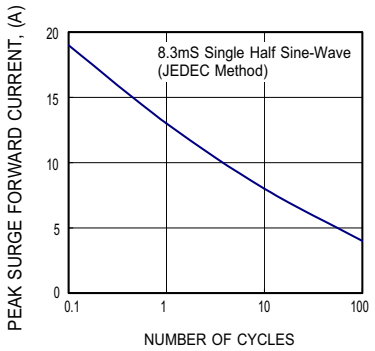


FIG.4 I_{FSM} -CYCLE CHARACTERISTICS

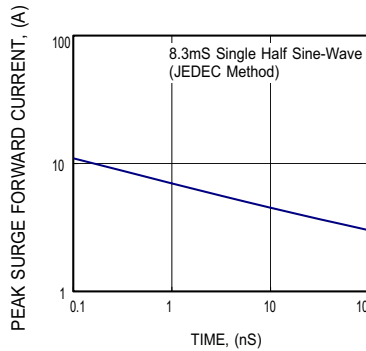


FIG.5 I_{FSM} - t CHARACTERISTICS

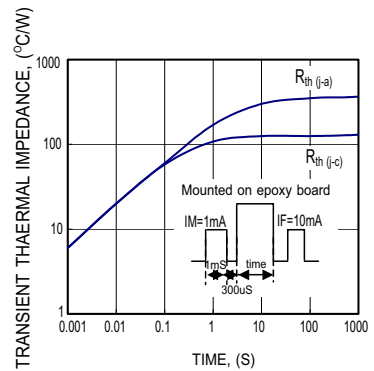


FIG.6 R_{th} - t CHARACTERISTICS

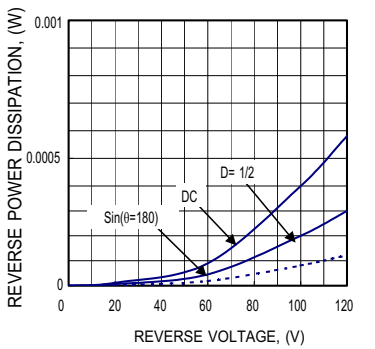


FIG.7 V_R - P_R CHARACTERISTICS

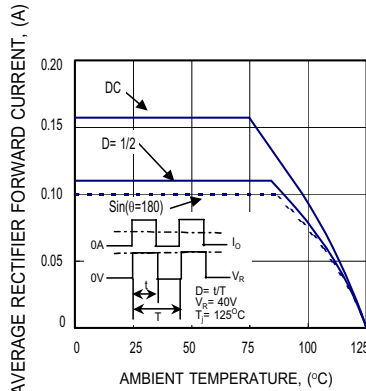


FIG.8 I_O - T_A CHARACTERISTICS

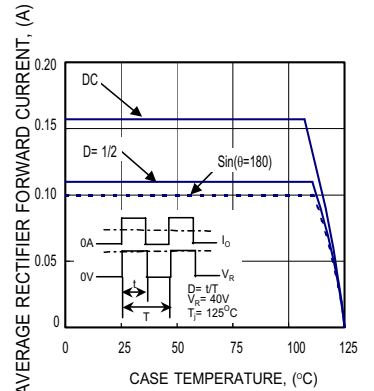


FIG.9 I_O - T_C CHARACTERISTICS

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