

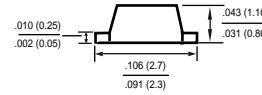
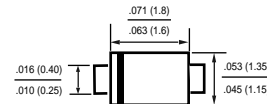
**FAST SWITCHING DIODE**  
**VOLTAGE 80 Volts CURRENT 150 mAmperes**

**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 Nicken(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 )

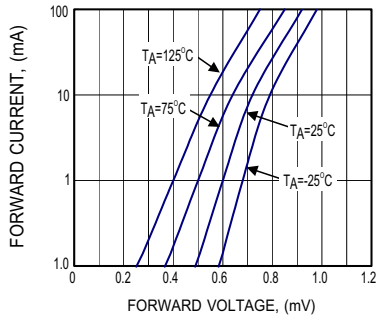


FIG.1  $V_F-I_F$  CHARACTERISTICS

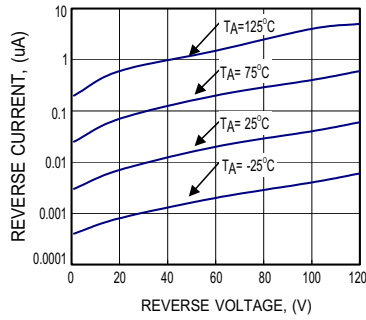


FIG.2  $V_R-I_R$  CHARACTERISTICS

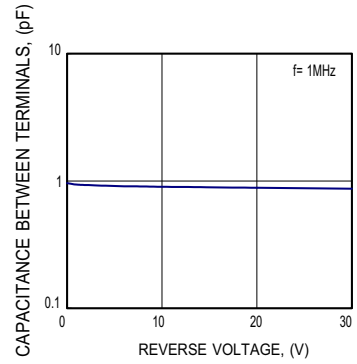


FIG.3  $V_R-C_t$  CHARACTERISTICS

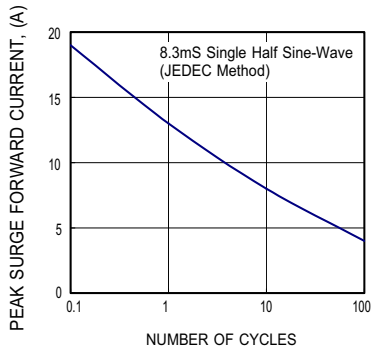


FIG.4  $I_{FSM}$ -CYCLE CHARACTERISTICS

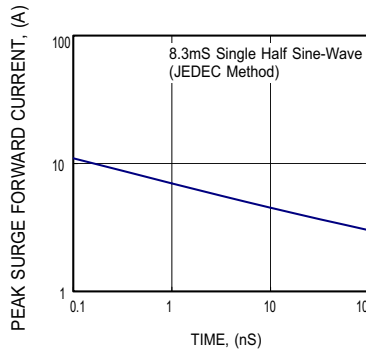


FIG.5  $I_{FSM}$ -t CHARACTERISTICS

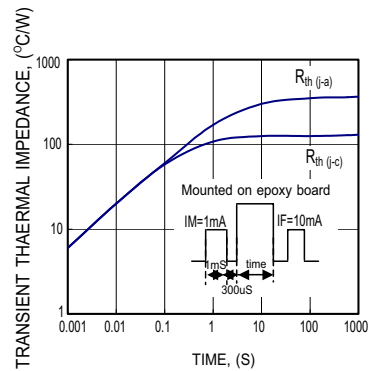


FIG.6  $R_{th}$ -t CHARACTERISTICS

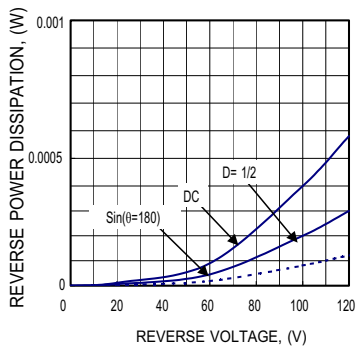


FIG.7  $V_R-P_R$  CHARACTERISTICS

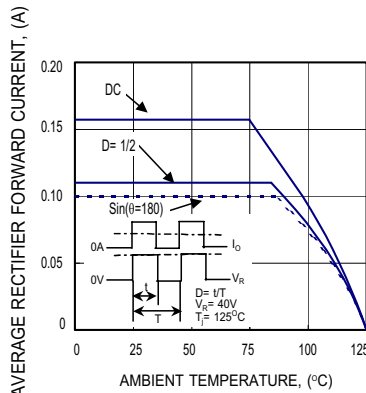


FIG.8  $I_O-T_A$  CHARACTERISTICS

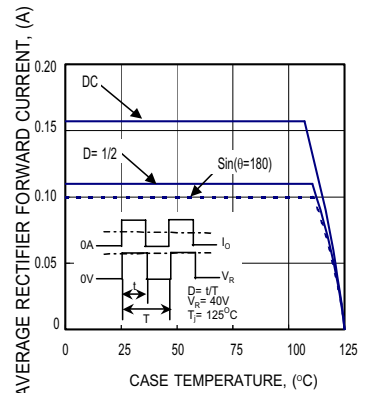


FIG.9  $I_O-T_C$  CHARACTERISTICS

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