

# ASD355-N

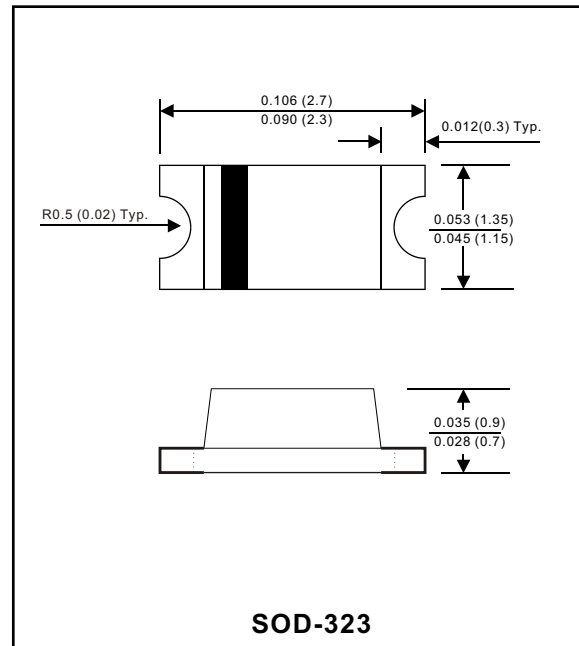
Silicon epitaxial planar type

## Features

- Small surface mounting type
- High reliability
- High speed ( $t_{rr} < 4 \text{ ns}$ )

## Mechanical data

Case : Molded plastic, JEDEC SOD-323  
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity : Indicated by cathode band  
 Mounting Position : Any  
 Weight : 0.000159 ounce, 0.0045 gram



## MAXIMUM RATINGS (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Repetitive peak reverse voltage		$V_{RRM}$			100	V
Peak forward surge current	$t_p < 1s$	$I_{FSM}$			500.0	mA
Average forward current	$V_R = 0$	$I_{FAV}$			100	mA
Power dissipation		$P_V$			350	mW
Junction temperature		$T_j$			175	$^\circ\text{C}$
Storage temperature		$T_{STG}$	-55		+175	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 10\text{mA}$	$V_F$			1.2	V
Reverse current	$V_R = 25\text{V}$	$I_R$			100	nA
	$V_R = 25\text{V}, T_j = 150^\circ\text{C}$	$I_R$			50	$\mu\text{A}$
	$V_R = 80\text{V}$	$I_R$			30	$\mu\text{A}$
Breakdown current	$I_R = 100\mu\text{A}, T_P/T = 0.01, T_P = 0.3\text{ms}$	$V_{(BR)}$	100			V
Diode capacitance	$V_R = 0, f = 1\text{MHz}, V_{HF} = 50\text{mV}$	$C_D$			4.0	pF
Thermal resistance	Junction to ambient	$R_{thJA}$				K/mW
Reverse recovery time	$I_F = 10\text{mA}, V_R = 6\text{V}, I_{RR} = 0.1 \times I_R, R_L = 100\Omega$	$t_{rr}$			4	ns

# RATING AND CHARACTERISTIC CURVES (ASD355-N)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

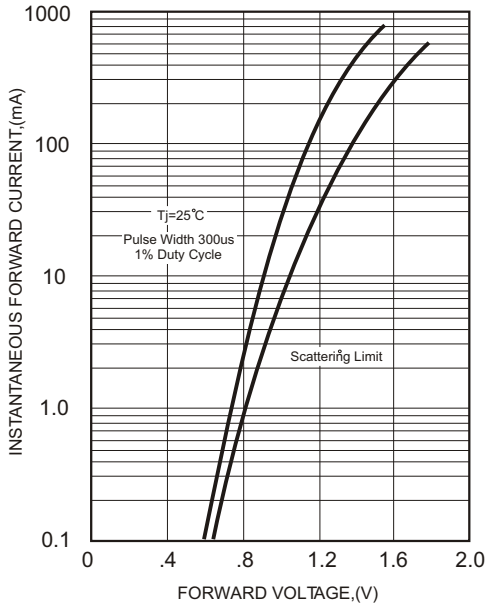


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

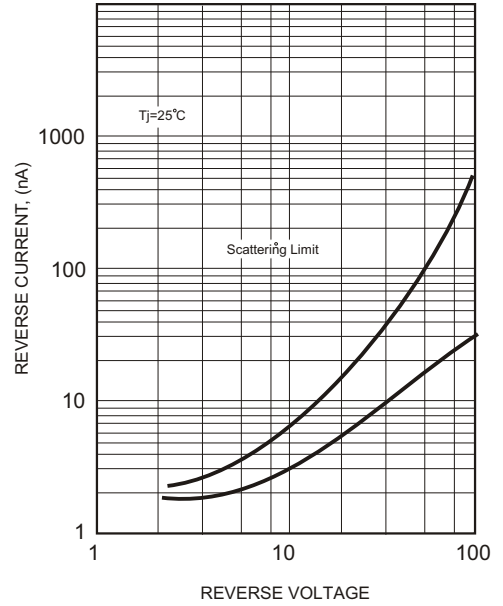


FIG.2 - TYPICAL DIODE CAPACITANCE

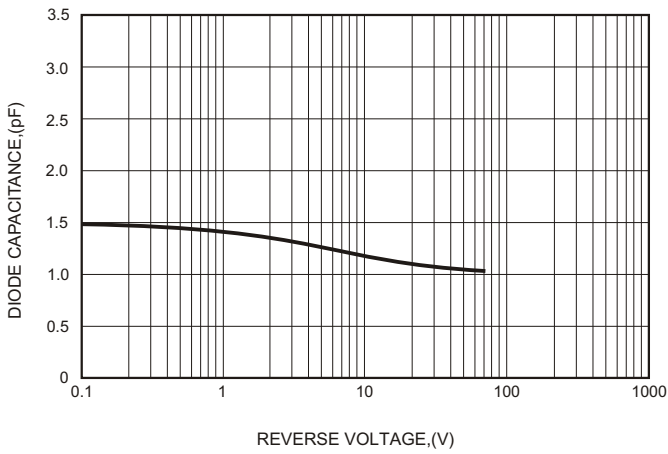


FIG.4 - REVERSE CURRENT VS JUNCTION TEMPERATURE

