

### ■ Features

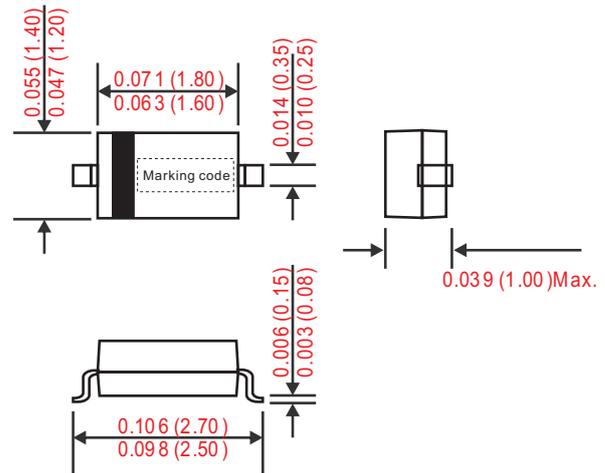
- Fast switching speed.
- Electrically identical to standard JEDEC.
- Surface mount package ideally suited for automatic insertion.
- Tiny plastic SMD package.
- Silicon epitaxial planar chip.
- Suffix "G" indicates Halogen-free part, ex. 1SS355G.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.0002 ounce, 0.005 gram

### ■ Outline

SOD-323



Dimensions in inches and (millimeters)

### ■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	1SS355	UNIT
Marking code		5D	
Repetitive peak reverse voltage	$V_{RM}$	90	V
DC reverse voltage ( $I_R = 100\mu A$ )	$V_R$	80	
Peak Forward current	$I_{FM}$	225	mA
Forward current	$I_O$	100	mA
Power dissipation	$P_D$	225	mW
Peak forward surge current $t = 1s$	$I_{FSM}$	500	mA
Junction temperature	$T_J$	125	°C
Storage temperature	$T_{STG}$	-55 ~ +125	

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 100mA$	$V_F$			1.2	V
Reverse current	$V_R = 80V$	$I_R$			0.1	$\mu A$
Diode capacitance	$V_R = 0.5V, f = 1MHz$	$C_D$			3.5	pF
Reverse recovery time	$V_R = 6V, I_F = 10mA, R_L = 100\Omega$	$T_{rr}$			4.0	ns

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

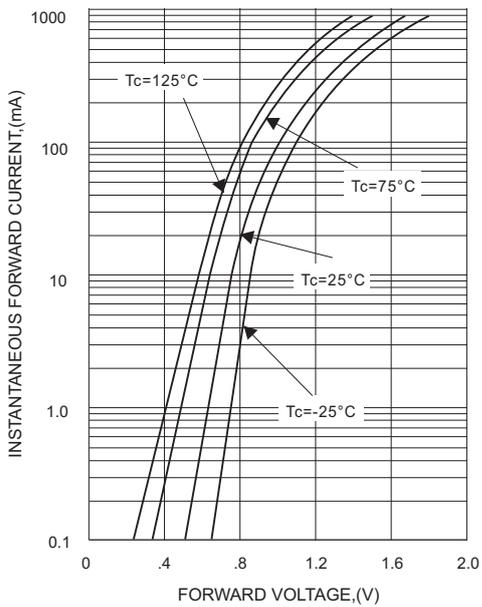


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

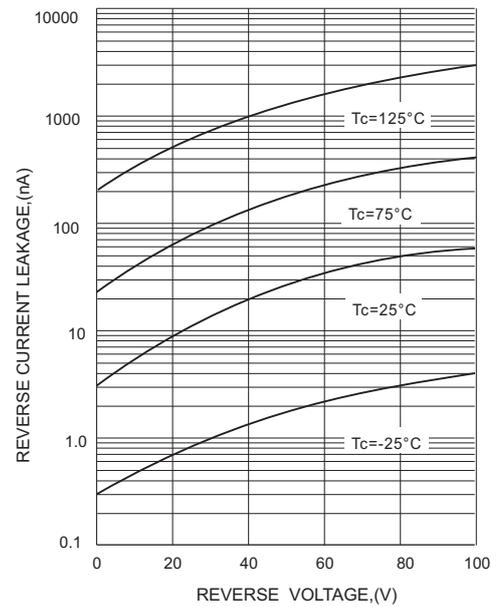
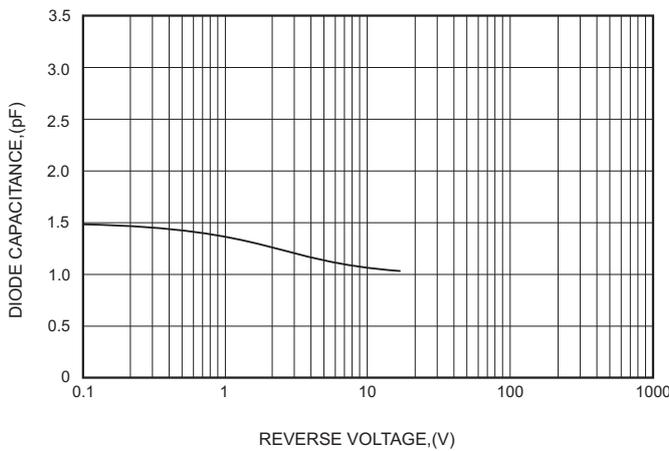
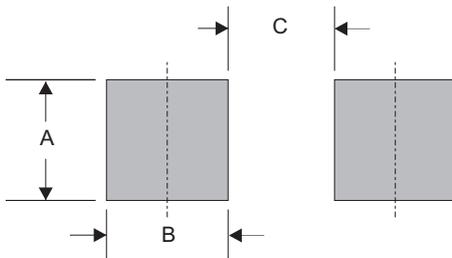


FIG.2 - TYPICAL DIODE CAPACITANCE



■ SOD-323 foot print



A	B	C
0.059 (1.50)	0.039 (1.00)	0.051 (1.30)

Dimensions in inches and (millimeters)

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