

## Features

- High Speed Switching Diode
- Surface Mount
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

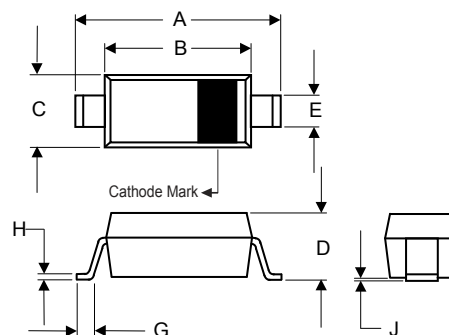
MCC Part Number	Device Marking
1SS404	S51

Parameter	Symbol	Value
Maximum Peak Reverse Voltage	$V_{RM}$	25V
DC Reverse Voltage	$V_R$	20V
Maximum Peak Forward Current	$I_{FM}$	700mA
Average Forward Current	$I_{F(AV)}$	300mA
Power Dissipation <sup>(N[ 1)</sup>	$P_D$	200mW

Notes: 1. When Mounted on a Glass Epoxy Board PCB: 20mm x 20mm, with Copper Pad 4mm x 4mm.

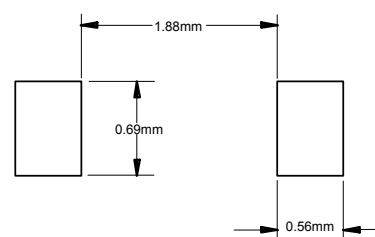
# High Speed Switching Diode

## SOD-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

## Suggested Solder Pad Layout



**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Forward Voltage	$V_F$	$I_F=1\text{mA}$		0.16		V
		$I_F=10\text{mA}$		0.22		V
		$I_F=300\text{mA}$		0.38		V
Reverse Current	$I_R$	$V_R=20\text{V}$			50	$\mu\text{A}$
Junction Capacitance	$C_J$	$V_R = 0\text{V}, f = 1\text{MHz}$			46	pF

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

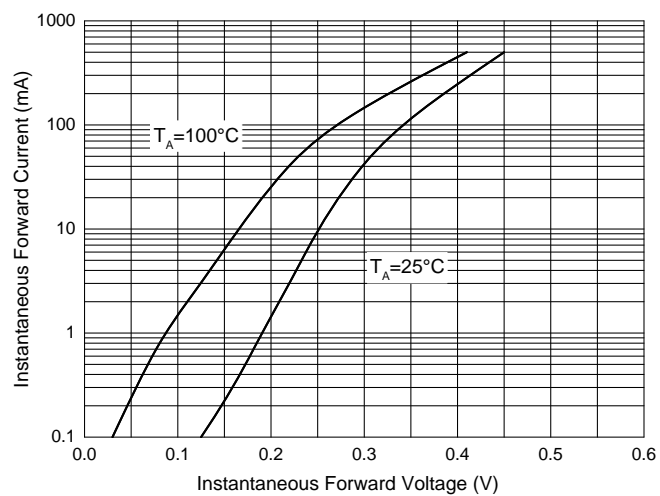


Fig. 2 - Typical Reverse Leakage Characteristics

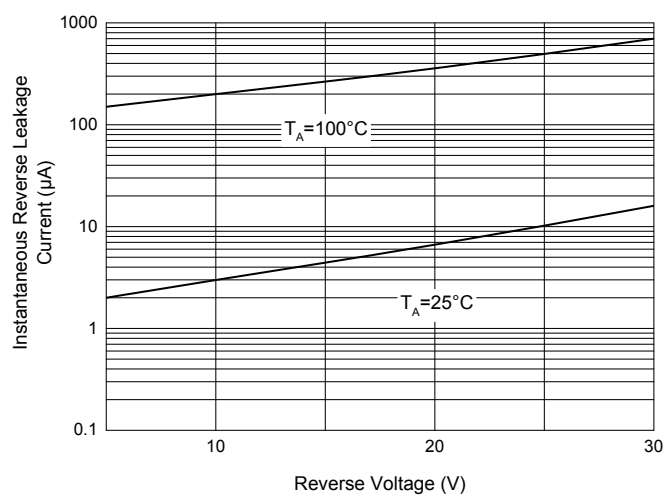
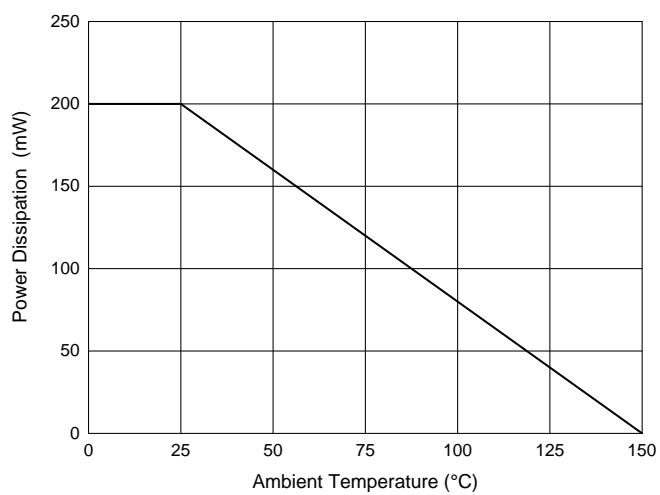


Fig. 3 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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