

# DAN217S3

HIGH-SPEED SWITCHING DIODE

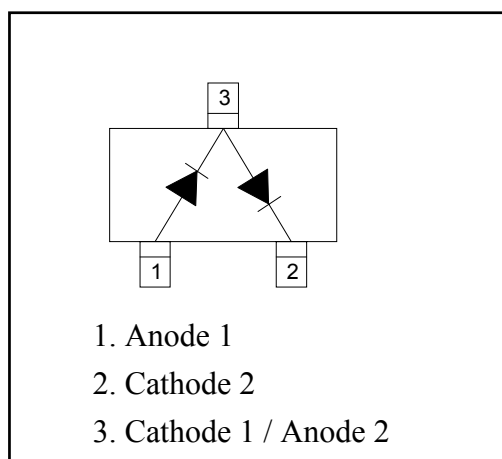
## Description

The DAN217S3 consists of two diodes in a plastic surface mount package. The diodes are connected in series and the unit is designed for high-speed switching application in hybrid thick and thin-film circuits.

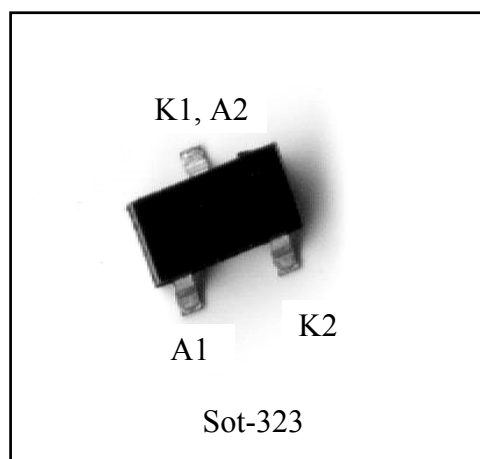
## Features

- Small SMD Package (SOT-323)
- Ultra-high Speed
- Low Forward Voltage
- Fast Reverse Recovery Time

## Equivalent Circuit



## Outline



## Absolute Maximum Ratings

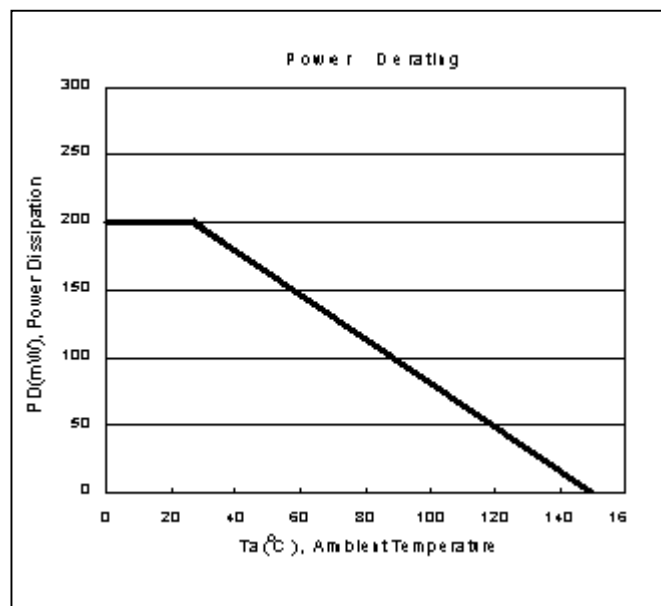
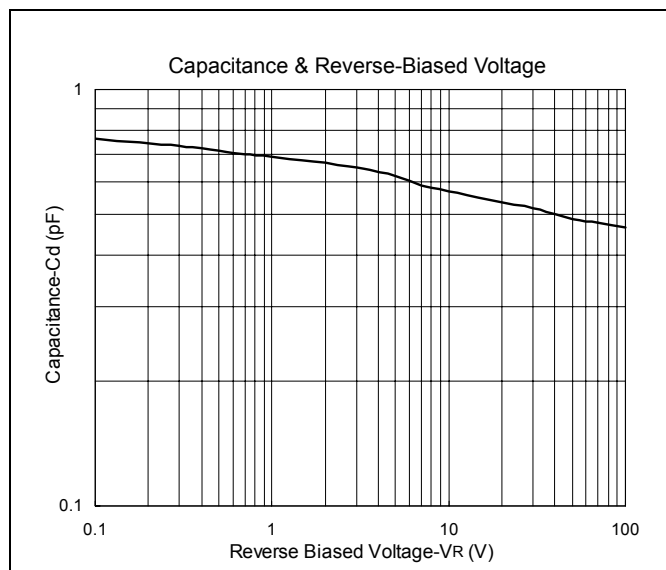
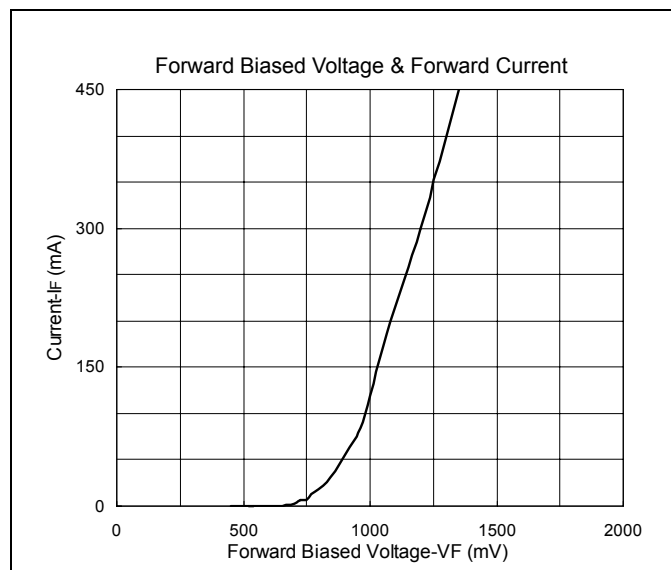
- Maximum Temperatures  
Storage Temperature ..... -65 ~ +150 °C  
Junction Temperature ..... +150 °C
- Maximum Power Dissipation  
Total Power Dissipation (Ta=25°C) ..... 200 mW
- Maximum Voltages and Currents (Ta=25°C)  
Reverse Voltage ..... 70 V  
Repetitive Reverse Voltage ..... 70 V  
Forward Current ..... 150 mA  
Repetitive Forward Current ..... 500 mA  
Forward Surge Current (1ms)..... 1000 mA

**Characteristics** (Ta=25°C)

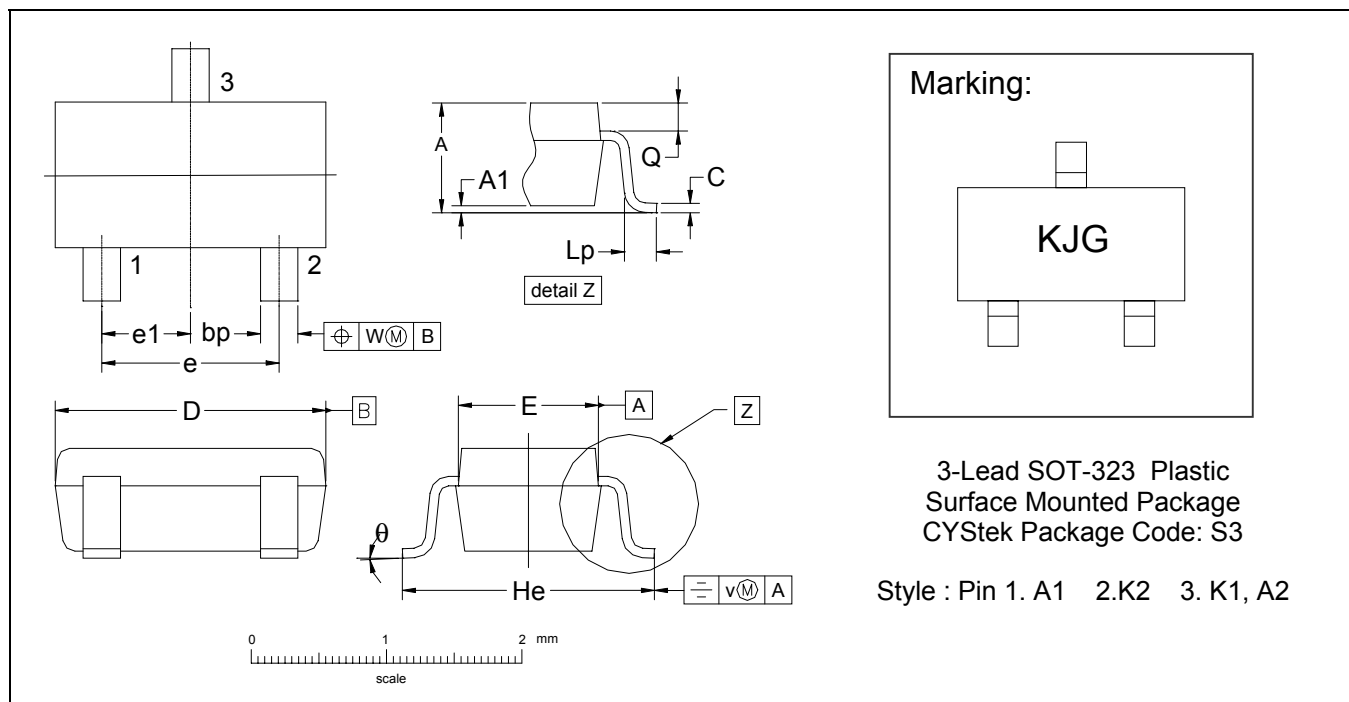
Characteristic	Symbol	Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu A$	70	-	V
Forward Voltage	$V_F(1)$	$I_F=1mA$	-	715	mV
	$V_F(2)$	$I_F=10mA$	-	855	mV
	$V_F(3)$	$I_F=50mA$	-	1000	mV
	$V_F(4)$	$I_F=150mA$	-	1250	mV
Reverse Current	$I_R$	$V_R=70$	-	2.5	$\mu A$
Total Capacitance	$C_T$	$V_R=0, f=1MHz$	-	1.5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10mA, R_L=100\Omega$ measured at $I_R=1mA$	-	6	ns



## Characteristic Curves



## SOT-323 Dimension



\*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0315	0.0433	0.80	1.10	e1	0.0256	-	0.65	-
A1	0.0000	0.0039	0.00	0.10	He	0.0787	0.0886	2.00	2.25
bp	0.0118	0.0157	0.30	0.40	Lp	0.0059	0.0177	0.15	0.45
C	0.0039	0.0098	0.10	0.25	Q	0.0051	0.0091	0.13	0.23
D	0.0709	0.0866	1.80	2.20	v	0.0079	-	0.2	-
E	0.0453	0.0531	1.15	1.35	w	0.0079	-	0.2	-
e	0.0512	-	1.3	-	θ	-	-	10°	0°

Notes: 1.Controlling dimension: millimeters.

2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.

3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

### Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

### Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of CYStek.
- CYStek reserves the right to make changes to its products without notice.
- CYStek **semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- CYStek assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.