


CYStek Electronics Corp.

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DAN217S3

HIGH-SPEED SWITCHING DIODE

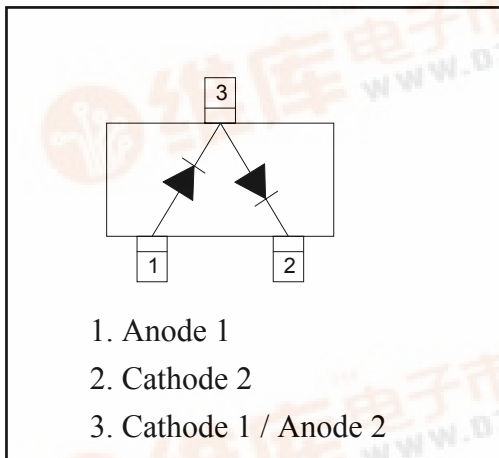
Description

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.

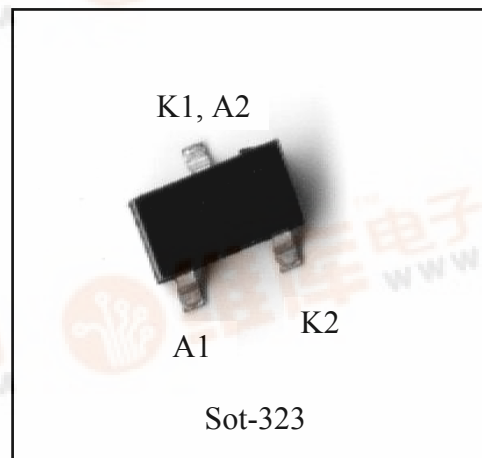
Features

- 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

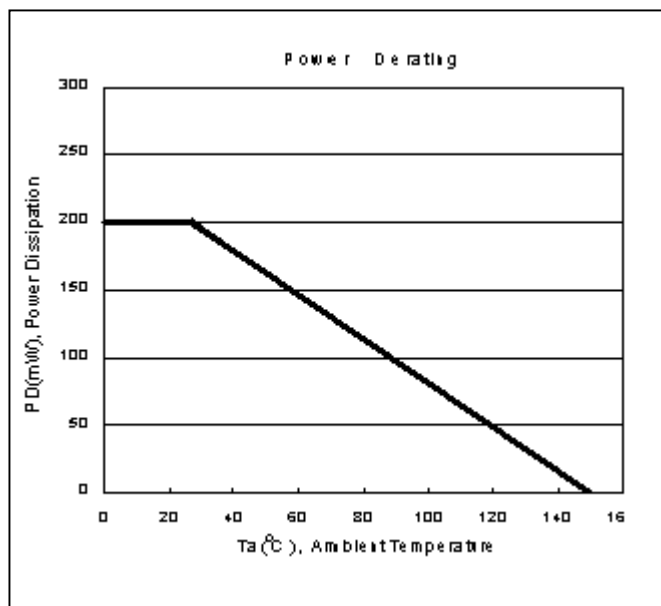
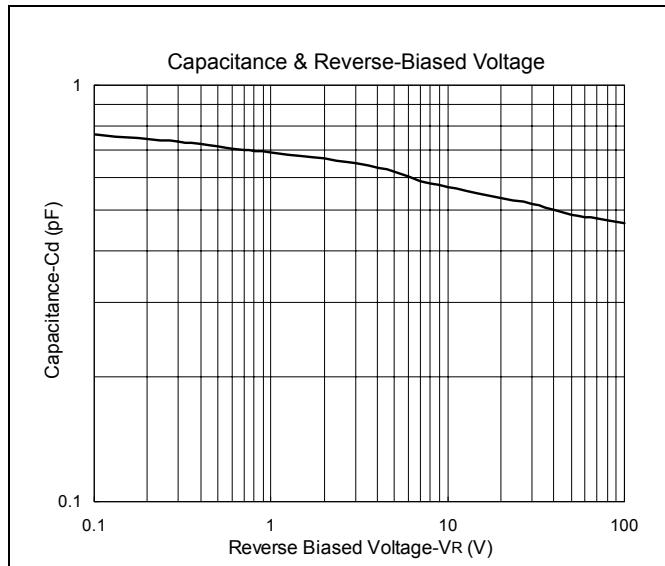
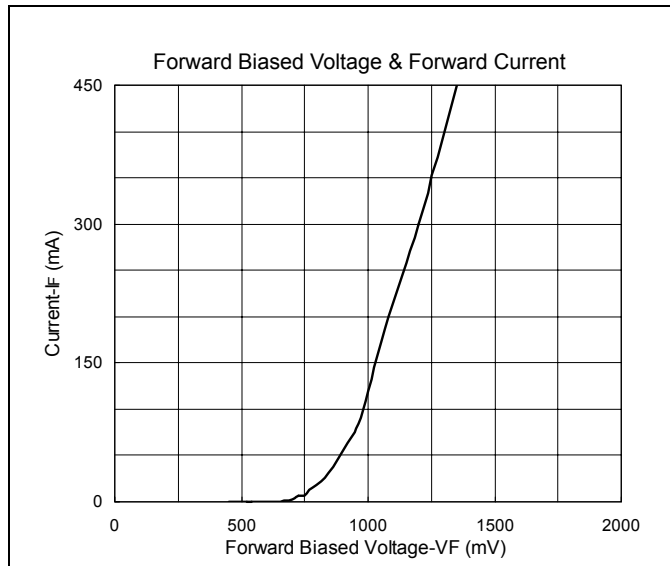


Characteristics (Ta=25°C)

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	μA
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

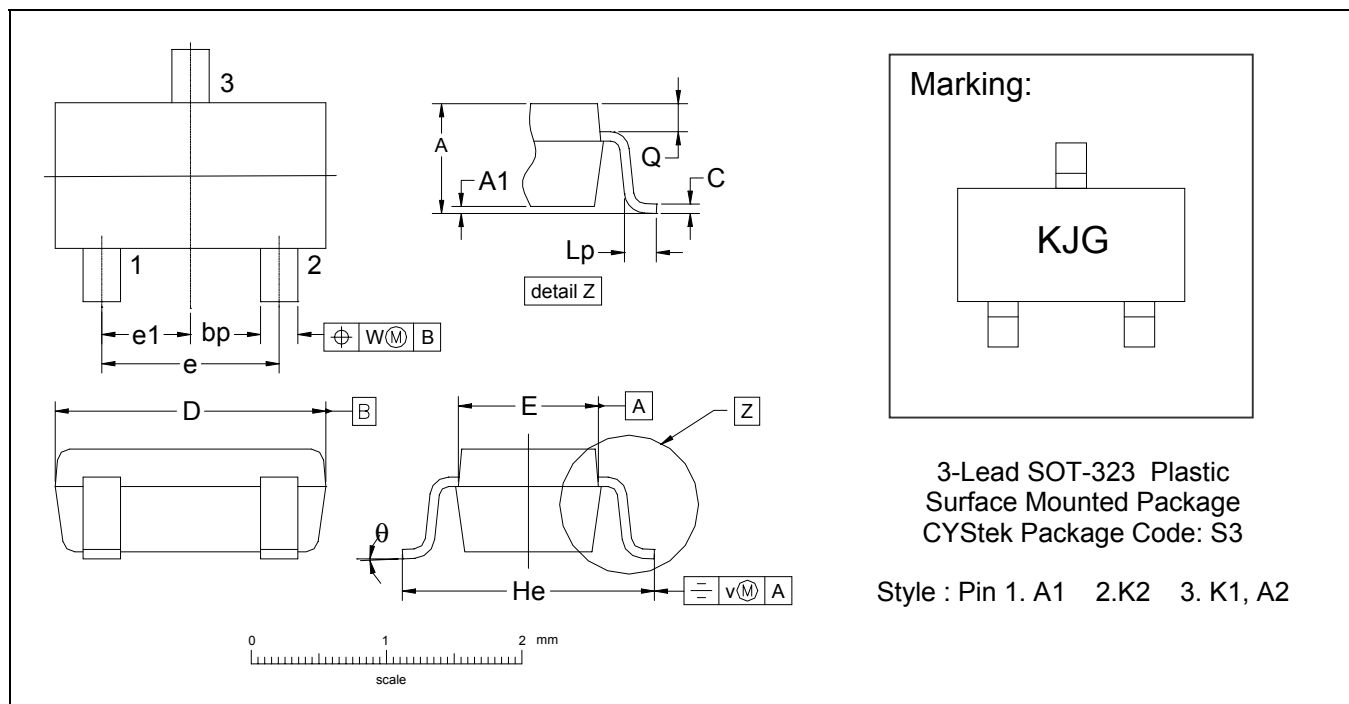


Characteristic Curves





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

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