DAN217S3

HIGH-SPEED SWITCHING DIODE

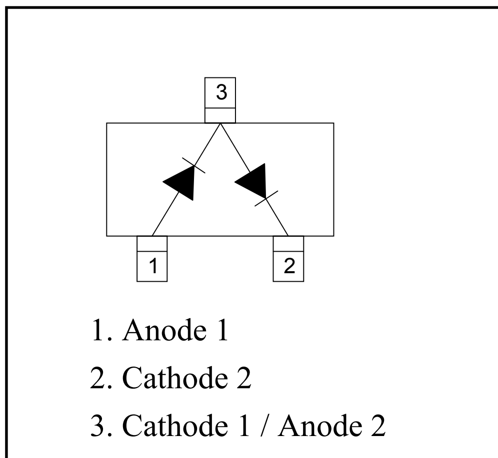
Description

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.

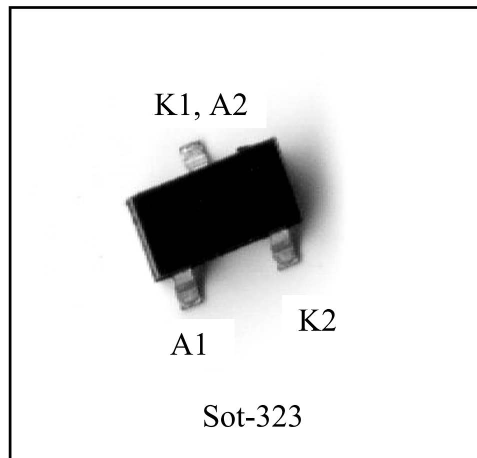
Features

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

Equivalent Circuit



Outline



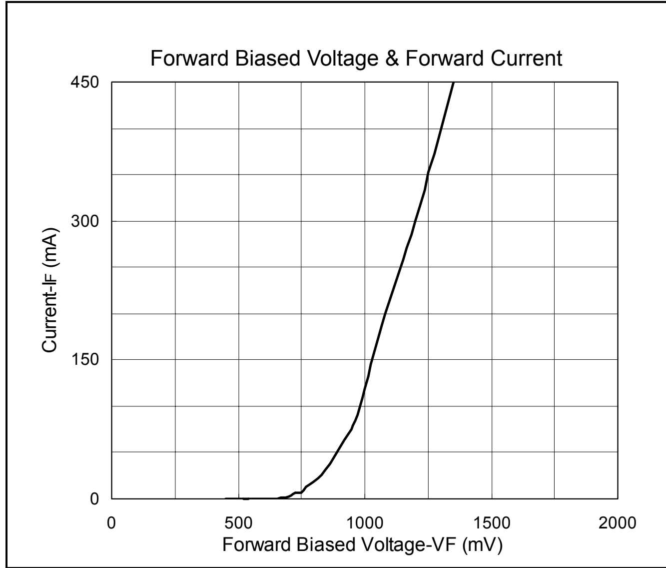
Absolute Maximum Ratings

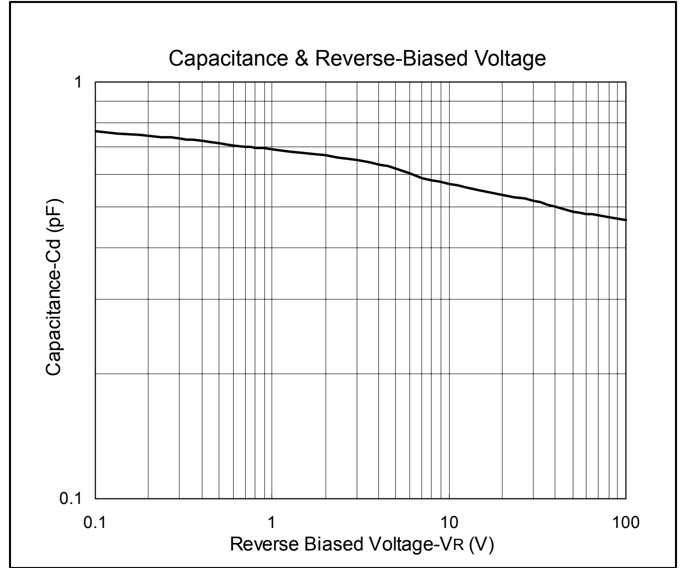
- Maximum Temperatures
  Storage Temperature .... -65 ~ +150 °C
  Junction Temperature .... +150 °C
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) .... 200 mW
- Maximum Voltages and Currents (Ta=25°C)
  Reverse Voltage .... 70 V
  Repetitive Reverse Voltage .... 70 V
  Forward Current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

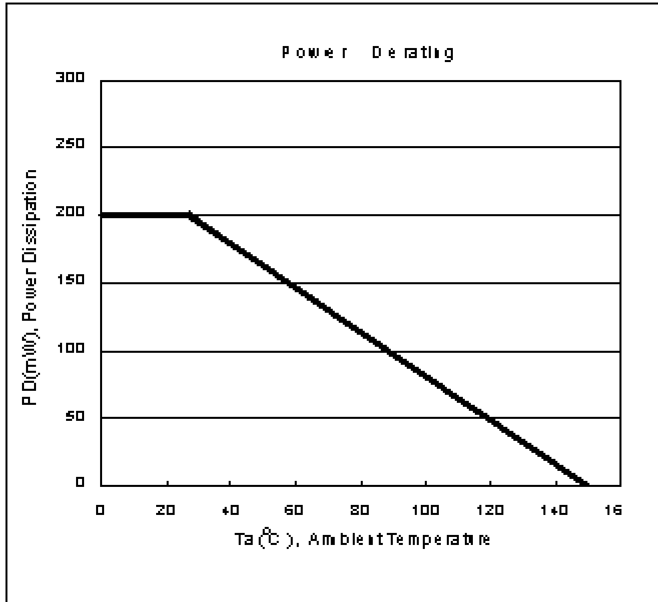
Characteristics (Ta=25°C)

Characteristic	Symbol	Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=100μA	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=100Ω measured at I_R=1mA	-	6	ns

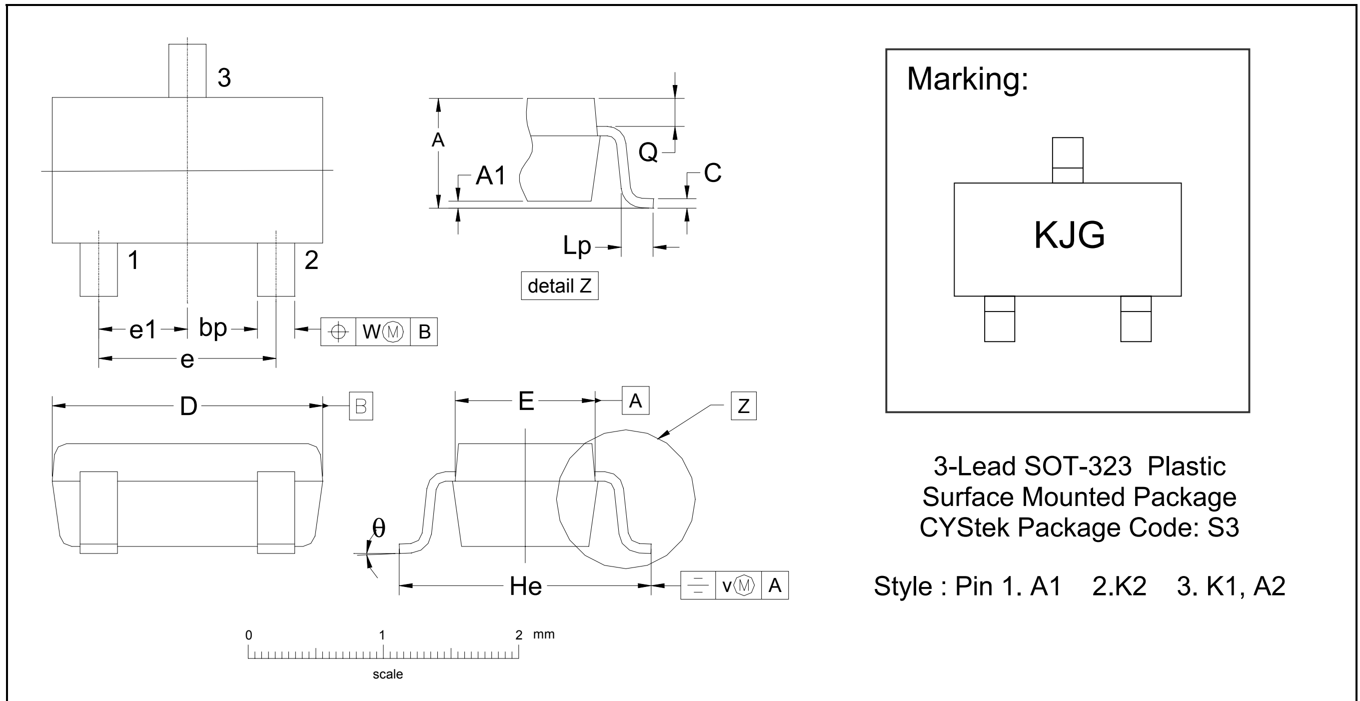
Characteristic Curves







SOT-323 Dimension



3-Lead SOT-323 Plastic
Surface Mounted Package
CYStek Package Code: S3

Style : Pin 1. A1 2.K2 3. K1, A2

*: 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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