DESCRIPTION

This Common Cathode Silicon Epitaxial Planar Dual Diode is designed for use in ultra high speed switching applications. This device is housed in the SC-89 package which is designed for low power surface mount applications, where board space is at a premium.

The DAN222 is available in SC-89 package.

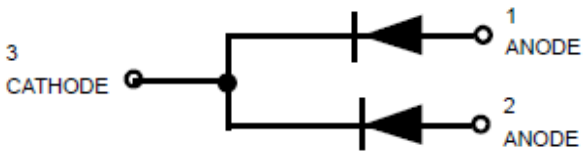
FEATURES

- Fast trr
- Low C_D
- Available in SC-89 package

ORDERING INFORMATION

Package Type	Part Number
SC-89	DAN222
Note	3,000pcs /Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

T_A = 25°C

V_R, Reverse Voltage	80Vdc
V_{RM}, Peak Reverse Voltage	80Vdc
I_F, Forward Current	100mAdc
I_{FM}, Peak Forward Current	300mAdc
I_{FSM}, Peak Forward Surge Current NOTE1	2.0Adc

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1: t = 1μS.

THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

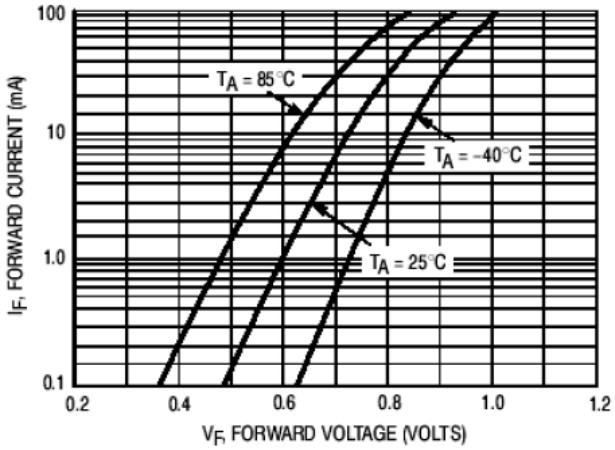
T_A = 25°C

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse Voltage Leakage Current	I_R	V_R = 70V	-	0.1	μAdc
Forward Voltage	V_F	I_F = 100mA	-	1.2	Vdc
Reverse Breakdown Voltage	V_R	I_R = 100 μA	80	-	Vdc
Diode Capacitance	C_D	V_R = 6.0V, f = 1.0MHz	-	3.5	pF
Reverse Recovery Time	trr NOTE2	I_F = 5.0mA, V_R = 6.0V, R_L = 100Ω, Irr = 0.1I_R	-	4.0	ns

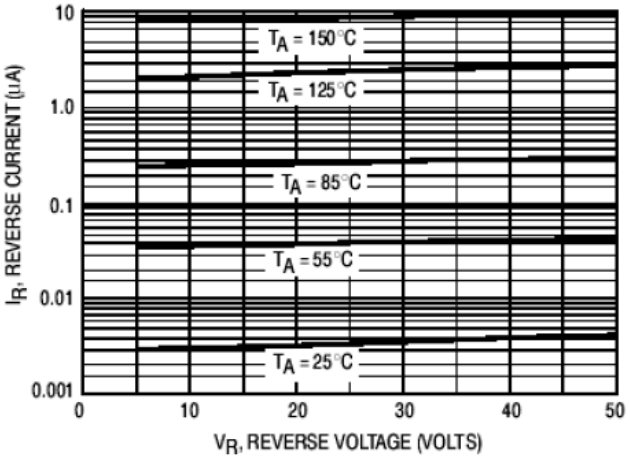
NOTE2: trr Test Circuit on following page.

TYPICAL CHARACTERISTICS

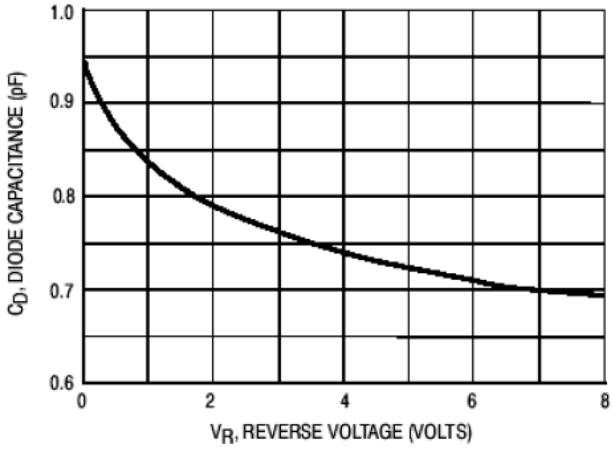
1. Forward Voltage



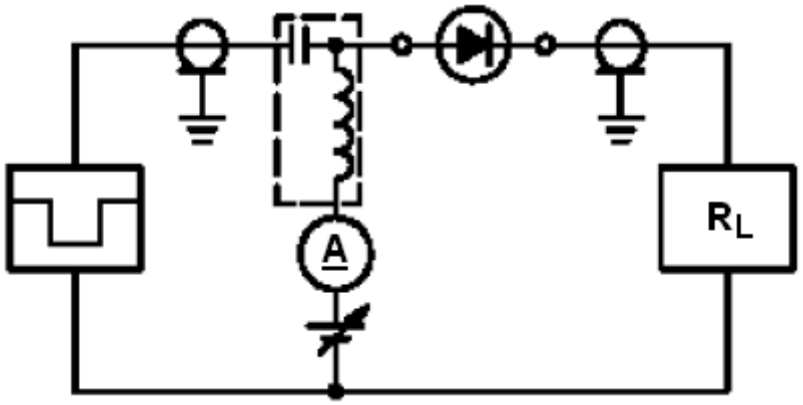
2. Reverse Current



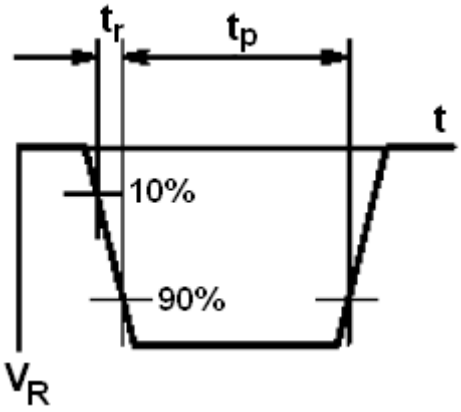
3. Diode Capacitance



RECOVERY TIME EQUIVALENT TEST CIRCUIT



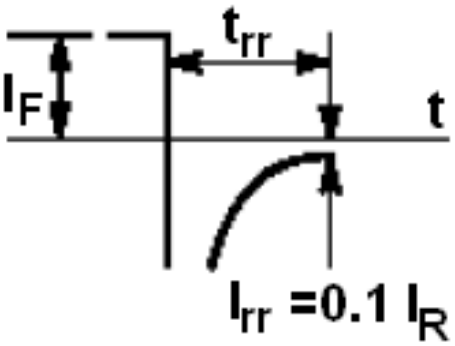
INPUT PULES



t_p=2μs

t_r=0.35ns

OUTPUT PULSE



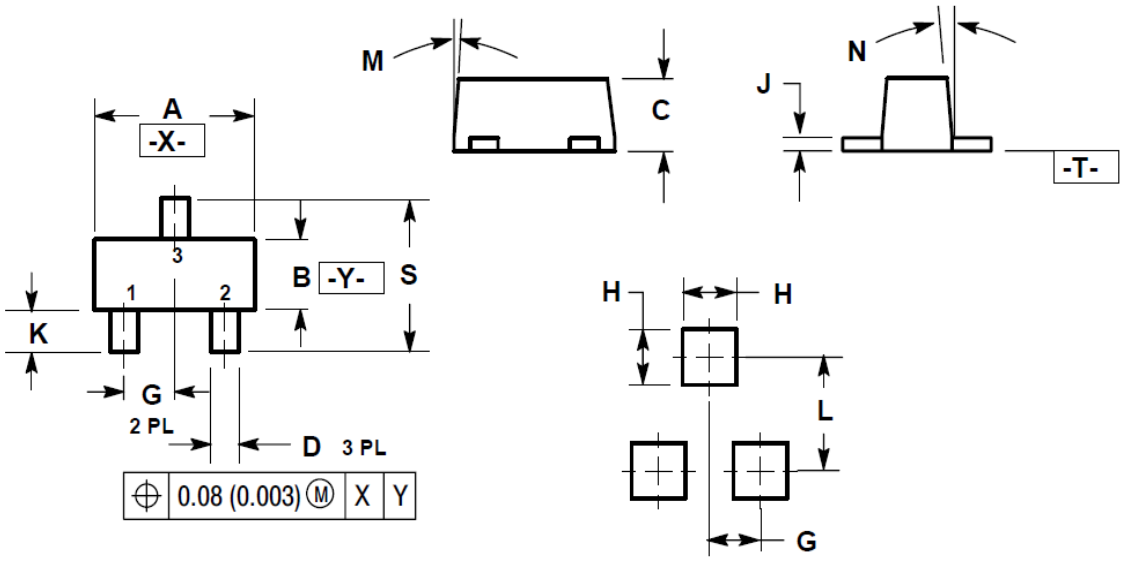
I_F=5.0mA

V_R=6V

R_L=100Ω

PACKAGE INFORMATION

Dimension in SC-89 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.50	1.70	0.059	0.067
B	0.75	0.95	0.030	0.040
C	0.60	0.80	0.024	0.031
D	0.23	0.33	0.009	0.013
G	0.50 BSC		0.020 BSC	
H	0.53 REF		0.021 REF	
J	0.10	0.20	0.004	0.008
K	0.30	0.50	0.012	0.020
L	1.10 REF		0.043 REF	
M	-	10°	-	10°
N	-	10°	-	10°
S	1.50	1.70	0.059	0.067

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