LITE-ON SEMICONDUCTORS

DAN222

SURFACE MOUNT
FAST SWITCHING DIODE

REVERSE VOLTAGE – 80 Volts
FORWARD CURRENT – 0.1 Ampere

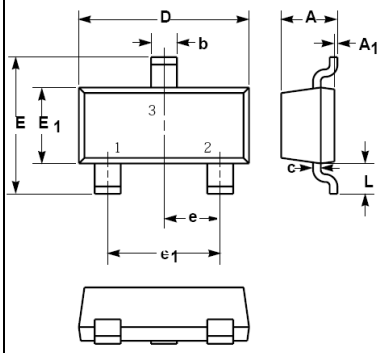
FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-523 Plastic
- Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant

SOT-523



SOT-523		
Dim.	Min.	Max.
A	0.70	0.90
A1	0.00	0.10
b	0.25	0.325
c	0.10	0.20
D	1.50	1.70
E	1.45	1.75
E1	0.75	0.85
e	0.50 Typ.	
e1	0.90	1.10
L	0.55 Ref.	
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic		Symbol	DAN222	Units
Peak Reverse Voltage		V_{RM}	80	V
DC Blocking Voltage		V_R	80	V
Forward Continuous Current		I_{FM}	300	mA
Average Rectified Output Current		I_O	100	mA
Peak Forward Surge Current	@t=1.0us	I_{FSM}	2	A
Power Dissipation		P_D	150	mW
Operating Temperature Range		T_J	150	℃
Storage Temperature Range		T_{STG}	-55~+150	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I_R = 100uA	V_{BR}	80	--	--	V
Maximum Forward Voltage	I_F = 100mA	V_F	--	--	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 70V	I_R	--	--	0.1	uA
Typical Diode Capacitance	V_R =0V,f=1MHz	C_D	--	--	3.5	pF
Reverse Recovery time	V_R =6V, I_F=5mA	trr	--	--	4	ns

REV. 2, Oct-2010, KSYR56

RATING AND CHARACTERISTIC CURVES
DAN222

Fig.1 Power Derating Curve

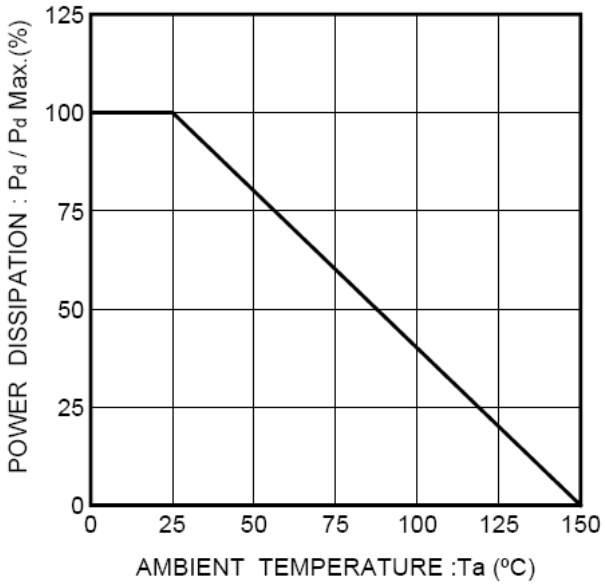


Fig.2 Typical Forward Characteristics

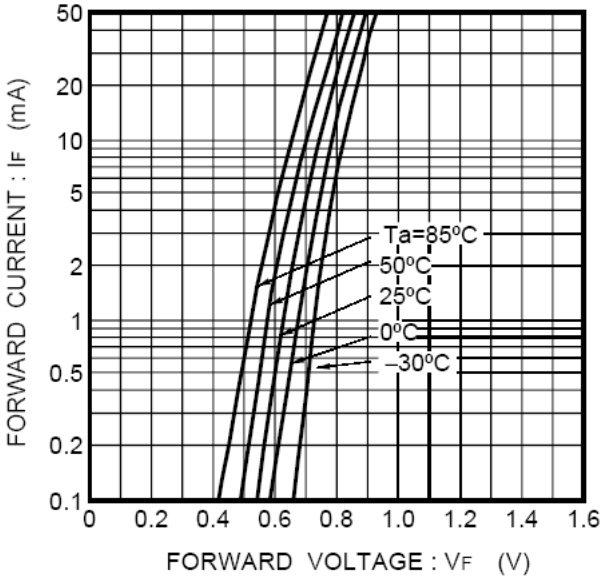


Fig.3 Typical Reverse Characteristics

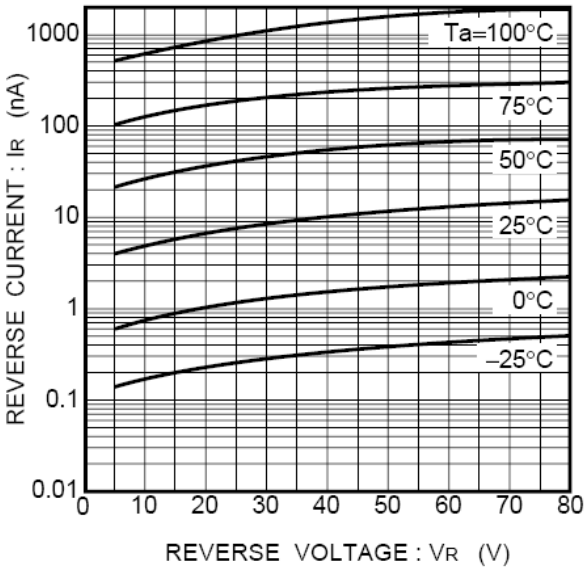
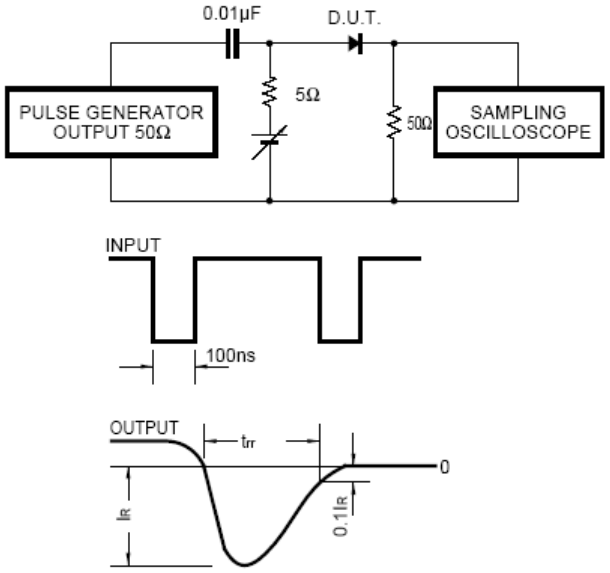
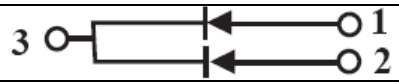


Fig.4 Reverse recovery time (trr) measurement circuit



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
DAN222	N	

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