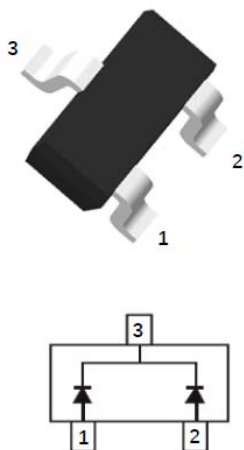


Dual Switching Diode



Features

- Moisture sensitivity level 1
- Reverse voltage: 80V
- Average forward current: 100mA

Application

- High frequency rectifier
- Signal switching

Mechanical data

- **Package:** SOT-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			N
Repetitive peak reverse voltage	V _{RRM}	V	80
Forward current, per leg	I _F	mA	100
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I _{FSM}	A	1
Non-repetitive surge peak forward current @ t=1ms square wave			1.5
Non-repetitive surge peak forward current @ t=1us square wave			2
Power dissipation	P _D	mW	150
Junction temperature	T _J	°C	-55 to +150
Storage temperature	T _{STG}	°C	-55 to +150

**■ Electrical Characteristics** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	$I_R=100\mu\text{A}$	80		
Forward voltage	V_F	V	$I_F=100\text{mA}$			1.2
Reverse leakage current	I_R	nA	$V_R=70\text{V}$			100
Junction capacitance	C_j	pF	$f=1.0\text{MHz}$, $V_R=6\text{V}$			3.5
Reverse recovery time	T_{rr}	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R$, $R_L=100\Omega$			4

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}^{(1)}$	$^{\circ}\text{C/W}$	833
Thermal resistance, junction-to-case	$R_{\theta J-C}^{(1)}$	$^{\circ}\text{C/W}$	666

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 25.4mm*25.4mm copper pad areas

■ Characteristics

Fig 1: P_D -Ta Curve

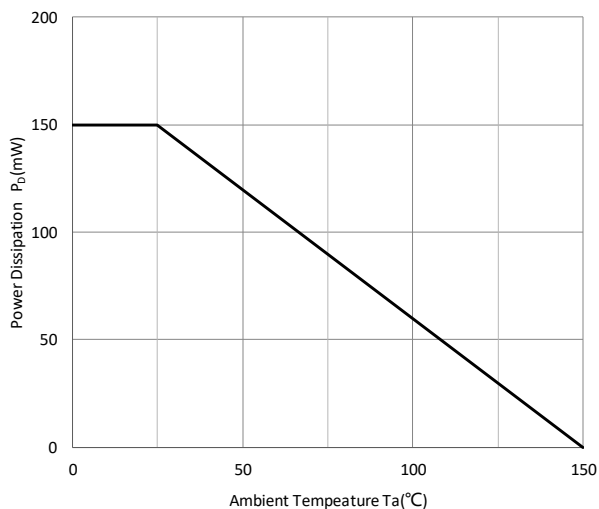


Fig 2: Capacitance Capability

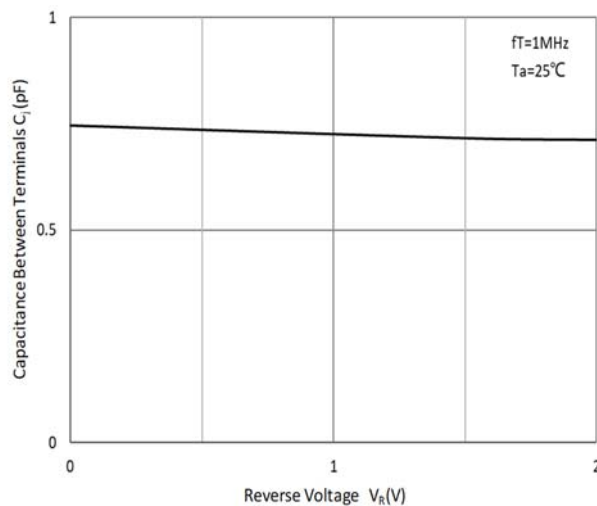


Fig 3: Typical Forward Characteristics

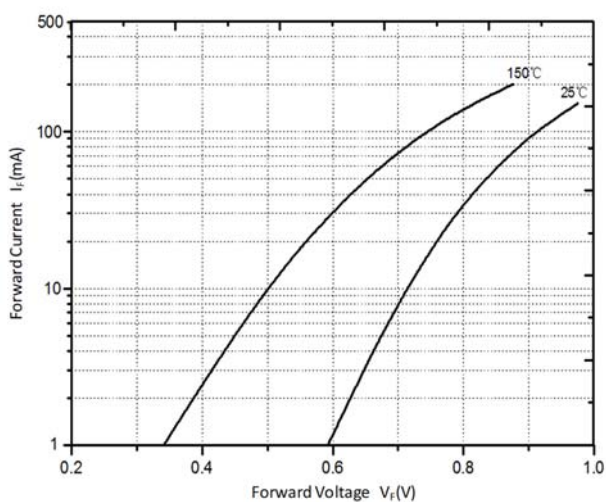
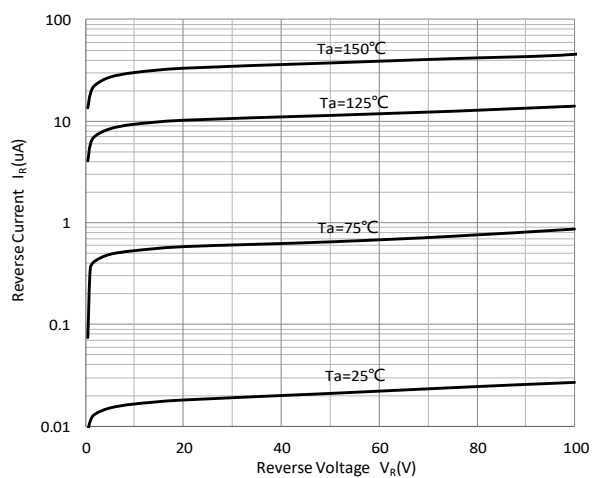


Fig 4: Typical Reverse Characteristics

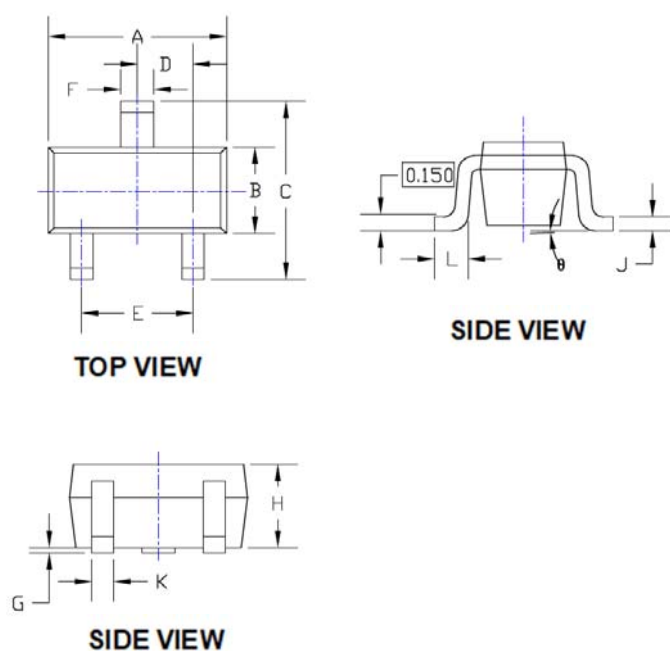




■ Ordering Information

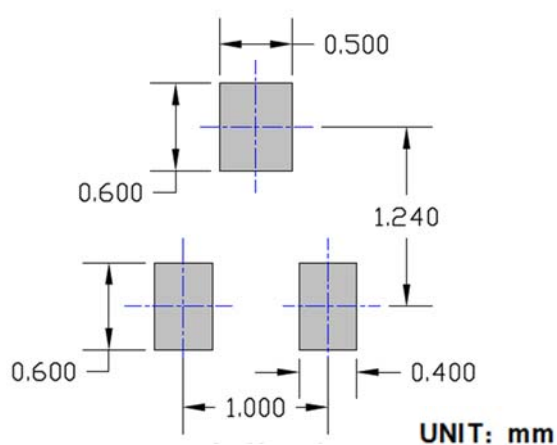
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DAN222	F2	Approximate 0.0027	3000	30000	120000	7" reel

■ Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.059	0.067	1.500	1.700
B	0.030	0.033	0.750	0.850
C	0.057	0.069	1.450	1.750
D	0.020TYP		0.500TYP	
E	0.035	0.043	0.900	1.100
F	0.010	0.018	0.250	0.450
G	0.000	0.004	0.000	0.100
H	0.024	0.031	0.600	0.800
J	0.004	0.008	0.100	0.200
K	0.006	0.014	0.150	0.350
L	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

■ Suggested Pad Layout





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