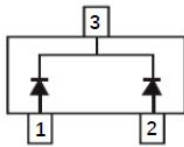
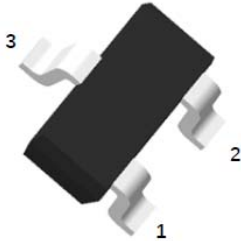


## Dual Switching Diode



### 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<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			N
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	80
Forward current, per leg	I <sub>F</sub>	mA	100
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I <sub>FSM</sub>	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 <sub>D</sub>	mW	150
Junction temperature	T <sub>J</sub>	°C	-55 to +150
Storage temperature	T <sub>STG</sub>	°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	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1*I_R$ , $R_L=100\Omega$			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:  $P_D$ - $T_a$  Curve

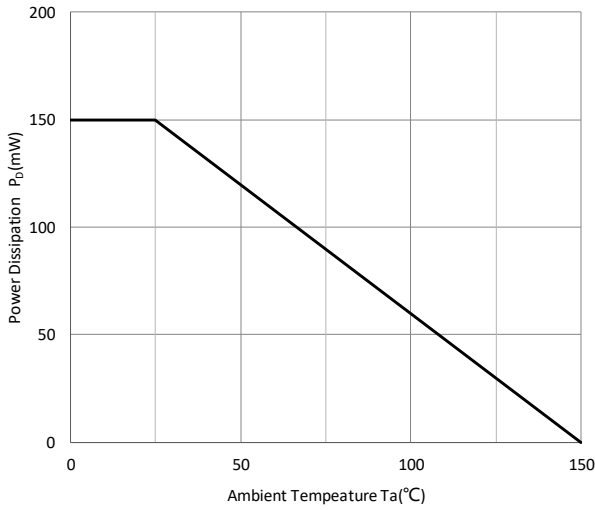


Fig 2: Capacitance Capability

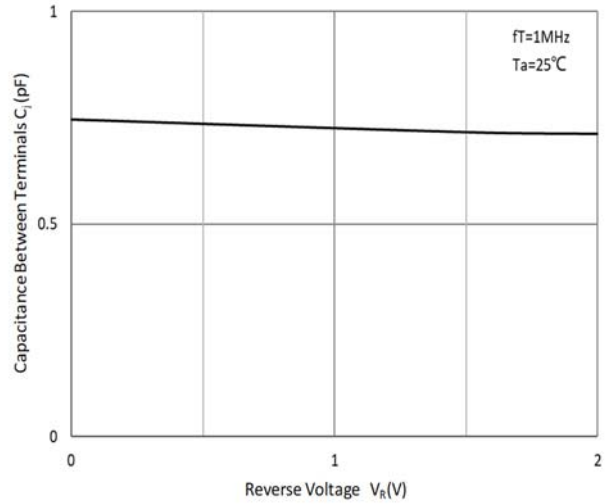


Fig 3: Typical Forward Characteristics

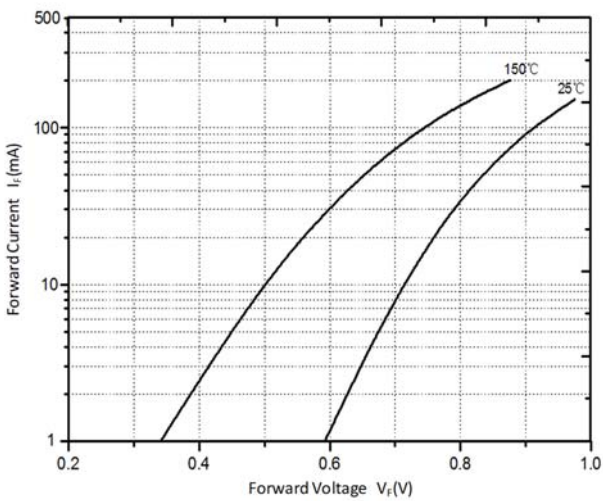
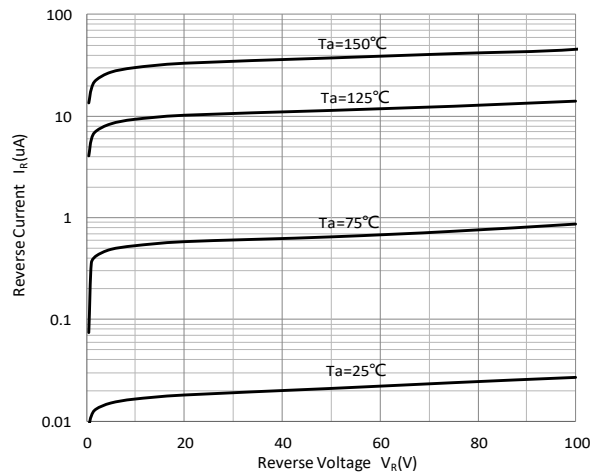


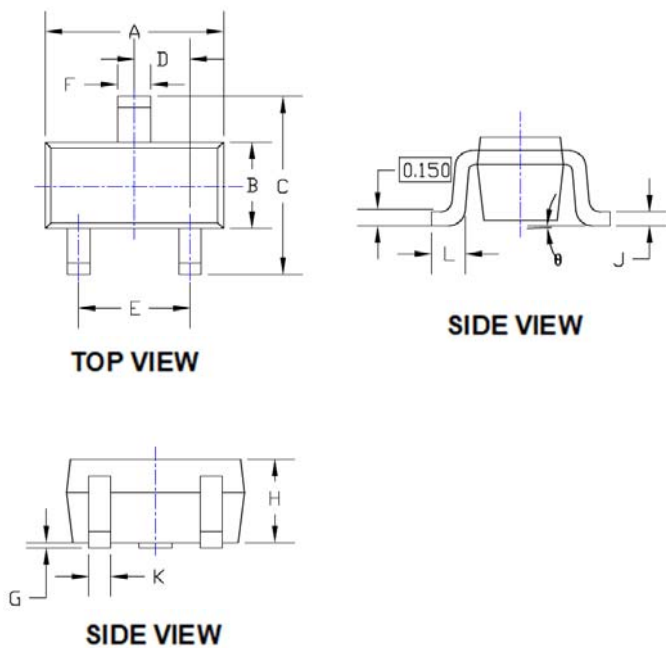
Fig 4: Typical Reverse Characteristics



## ■ Ordering Information

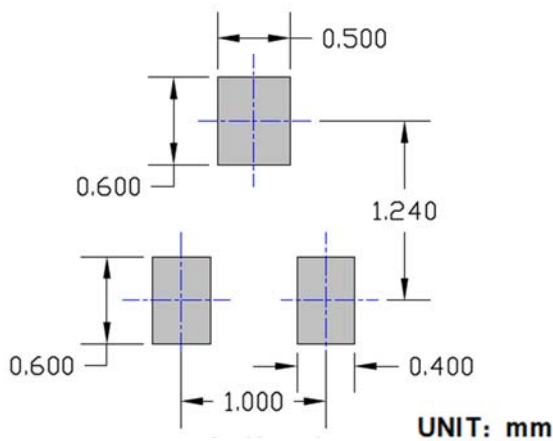
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DAN222	F2	Approximate 0.0027	3000	30000	120000	7" reel

## ■ 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
$\theta$	0°	8°	0°	8°

## ■ Suggested Pad Layout





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