

Features

- High Speed
- High Reliability
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking	Peak Repetitive Reverse Voltage V_{RM}
DAN222	N	80V
DAP222	P	80V

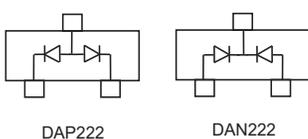
Continuous Forward Current	I_F	100mA
Peak Forward Surge Current *	I_{FSM}	300mA

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Forward Voltage	V_F	1.2V	$I_F=100.0mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.1 μA	$V_R=70V$
Maximum Junction Capacitance	C_D	3.5pF	$V_R=1.0V, f=1.0MHz$
Maximum Reverse Recovery Time	t_{rr}	4.0ns	$V_R=1.0V, I_F=5.0mA$

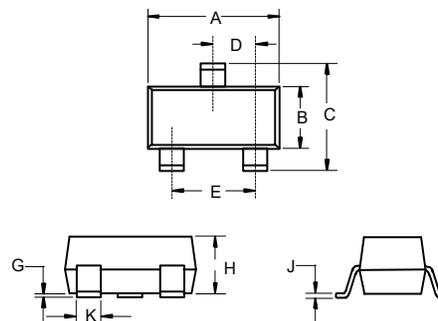
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



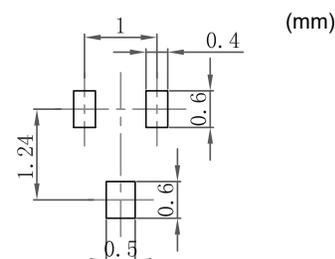
100 mA Switching Diode 80 Volts

SOT-523



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020 Nominal		0.50 Nominal		
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.024	0.031	0.60	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

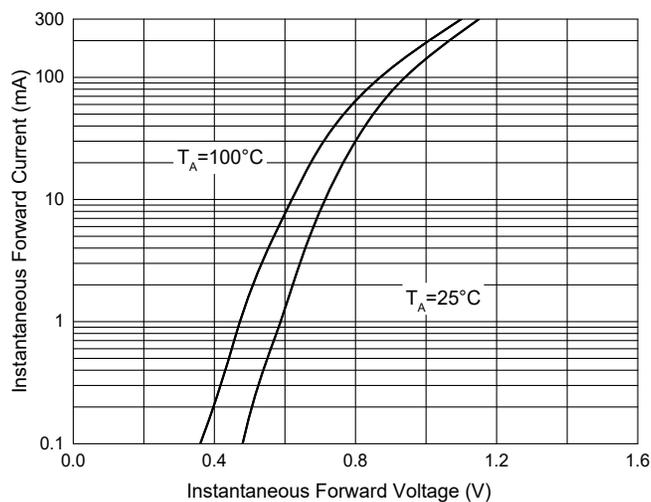


Fig. 2 - Typical Reverse Leakage Characteristics

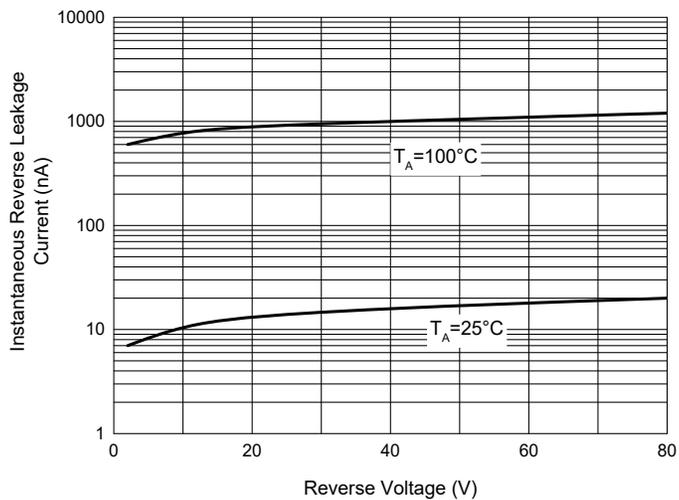


Fig. 3 - Power Derating Curve

