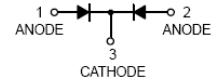


Features

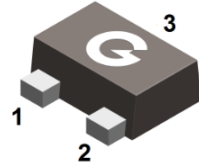
- Ultra-small surface mount package
- Fast switching speed
- For general purpose switching applications
- Low conductance
- RoHS compliant with Halogen-free

HF



Mechanical Data

- Case: SOT-723
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



SOT-723

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
DAN222M	SOT-723	10000 pcs / Tape & Reel	N

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RM}	80	V
Reverse Voltage	V _R	80	V
Average Rectified Output Current	I _F	100	mA
Forward Continuous Current (Peak)	I _{FM}	300	mA
Peak Forward Surge Current, (t = 1μs)	I _{FSM}	4	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	150	mW
Thermal Resistance Junction-to-Air ^{*1}	R _{θJA}	190	°C/W
Thermal Resistance Junction-to-Case ^{*1}	R _{θJC}	95	°C/W
Thermal Resistance Junction-to-Lead ^{*1}	R _{θJL}	115	°C/W
Operating Junction Temperature Range	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Note 1: The data tested by surface mounted on a 1 inch² FR-4 board with 2OZ copper

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 100\mu\text{A}$	80	-	-	V
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	-	1.2	V
Maximum Peak Reverse Current	I_R	$V_R = 70\text{V}$	-	-	0.1	μA
Total Capacitance	C_J	$V_R = 6\text{V}, f = 1.0\text{MHz}$	-	-	3.5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 5.0\text{mA}, I_{rr} = 0.1 \cdot I_R$ $R_L = 100\Omega, V_R = 6.0\text{V}$	-	-	4	ns

Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

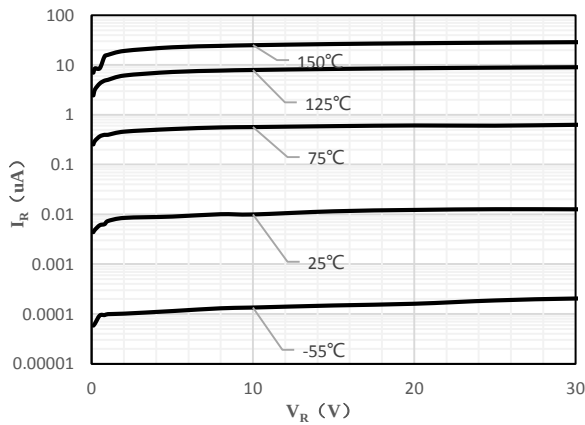


Fig 1 Typical Reverse Characteristic

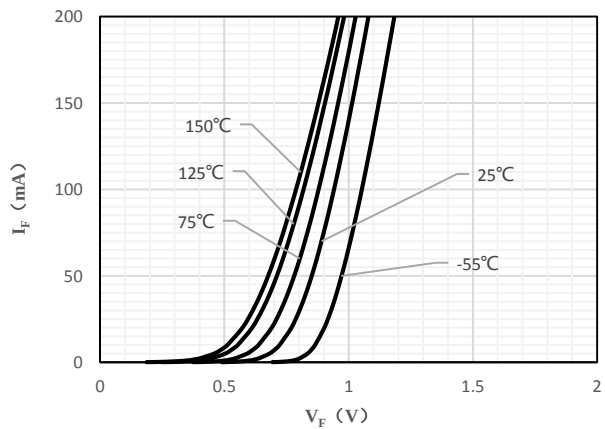


Fig 2 Typical Forward Characteristics

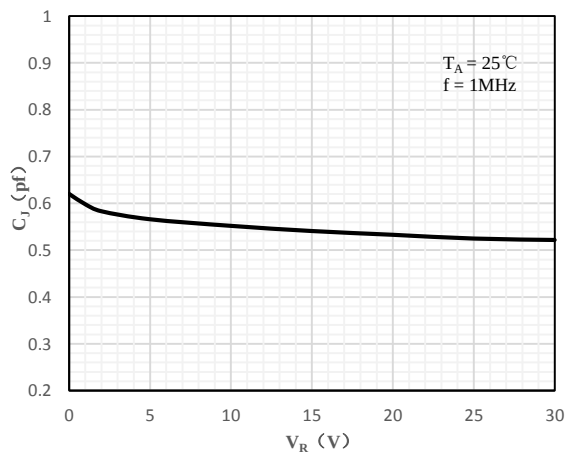
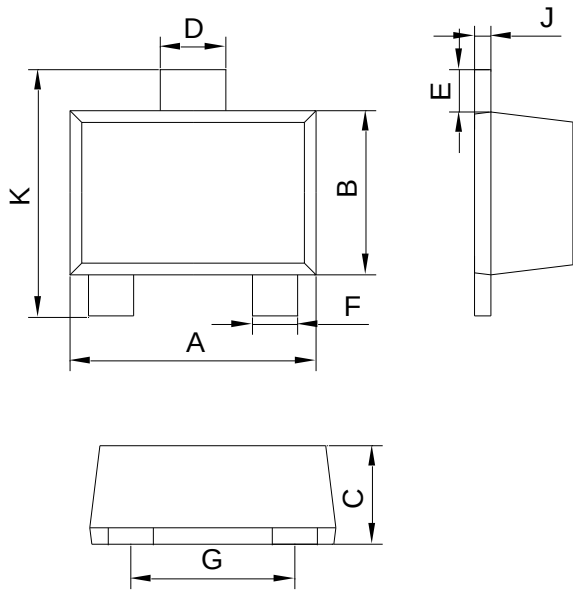


Fig 3 Capacitance vs. Reverse Voltage

Package Outline Dimensions (Unit: mm)



SOT-723		
Dimension	Min.	Max.
A	1.10	1.30
B	0.70	0.90
C	0.40	0.54
D	0.22	0.42
E	0.10	0.30
F	0.12	0.32
G	0.70	0.90
J	0.08	0.15
K	1.10	1.30

Package Outline Dimensions (Unit: mm)

SOT-723

