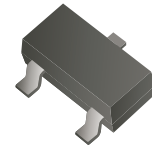


DAN202U-HF

**RoHS Device
Halogen Free**



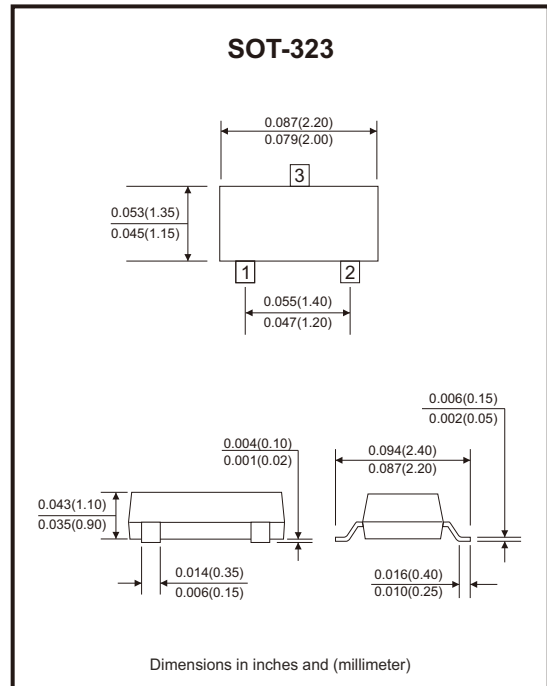
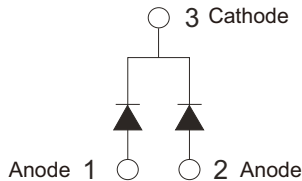
Features

- High speed switching.
- High reliability.

Mechanical data

- Case: SOT-323, molded plastic.
- Molding compound: UL flammability classification rating 94V-0.
- Terminals: Matte tin-plated leads, solderability per MIL-STD-202, method 208.

Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

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
Non-repetitive peak forward surge current @ t = 8.3ms	I_{FSM}	2	A
Power dissipation	P_D	200	mW
Thermal resistance junction to air (Note 1)	$R_{\theta JA}$	466	°C/W
Thermal resistance junction to case (Note 1)	$R_{\theta JC}$	250	°C/W
Thermal resistance junction to lead (Note 1)	$R_{\theta JL}$	271	°C/W
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note: 1. The data tested by surface mounted on a 15mm x 15mm x 1mm FR4-epoxy P.C.B.

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$I_R = 100\mu A$	$V_{(BR)}$	80			V
Forward voltage	$I_F = 100mA$	V_F			1.2	V
Maximum peak reverse current	$V_R = 70V$	I_R			0.1	μA
Total capacitance	$V_R = 6V, f = 1MHz$	C_J			3.5	pF
Reverse recovery time	$I_F = 5mA, V_R = 6V, R_L = 50\Omega$	t_{rr}			4	nS

Rating and Characteristic Curves (DAN202U-HF)

Fig.1 - Typical Reverse Characteristics

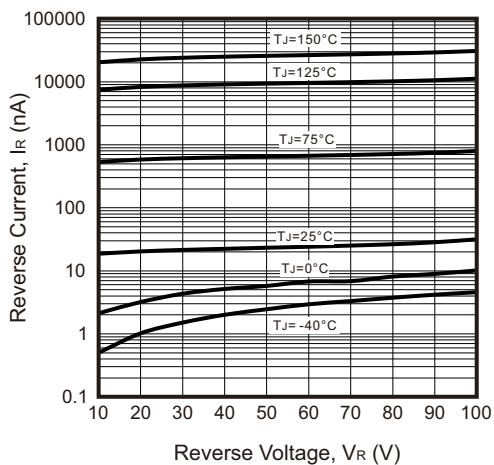


Fig.2 - Typical Forward Characteristics

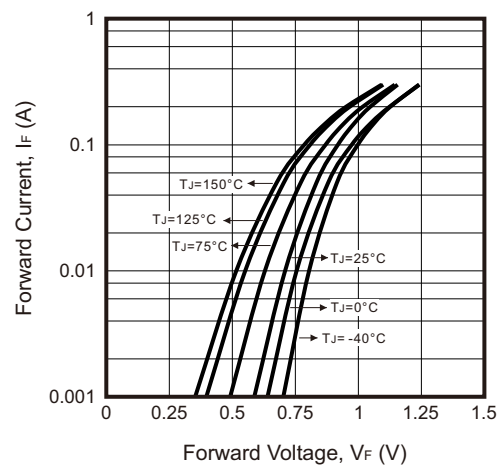
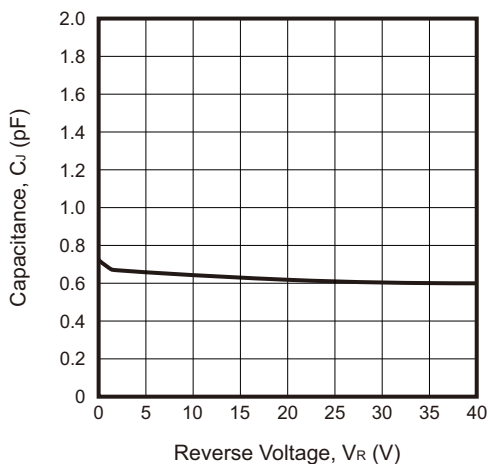
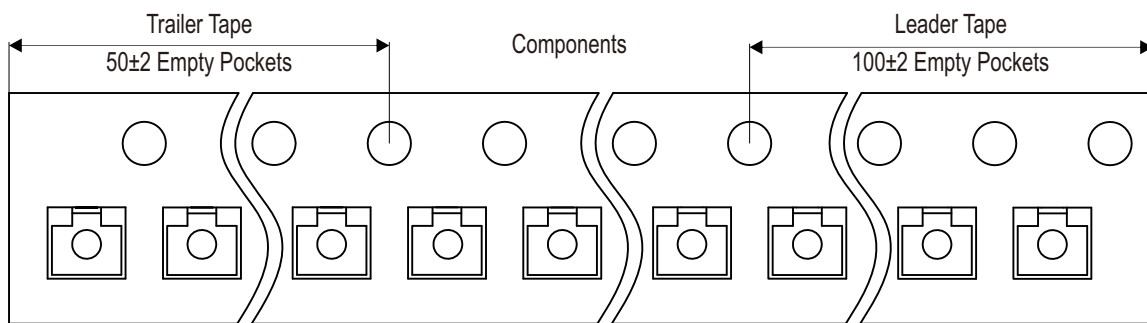
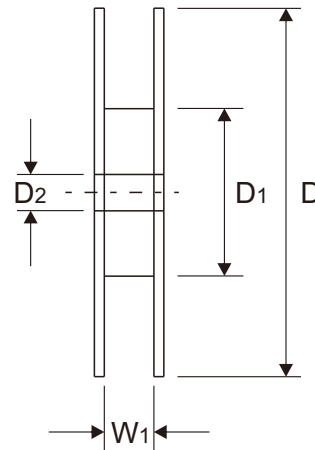
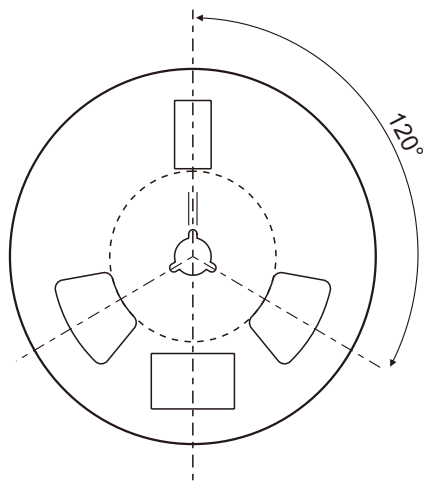
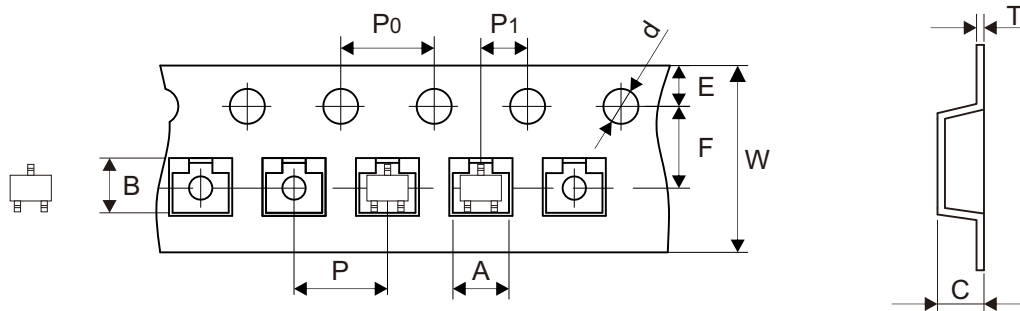


Fig.3 - Capacitance vs. Reverse Voltage



Reel Taping Specification

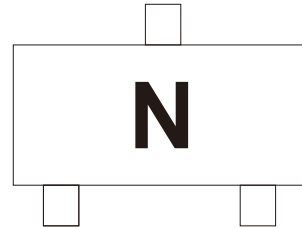


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.19 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOT-323	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.22 ± 0.02	8.00 + 0.30 - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.315 + 0.012 - 0.004	0.374 ± 0.039

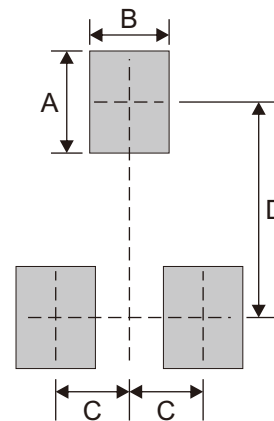
Marking Code

Part Number	Marking Code
DAN202U-HF	N



Suggested P.C.B. PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.90	0.035
B	0.70	0.028
C	0.65	0.026
D	1.90	0.075



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-323	3,000	7