

CDSZC01100-HF

$I_o = 100 \text{ mA}$
 $V_R = 80 \text{ Volts}$
RoHS Device
Halogen Free



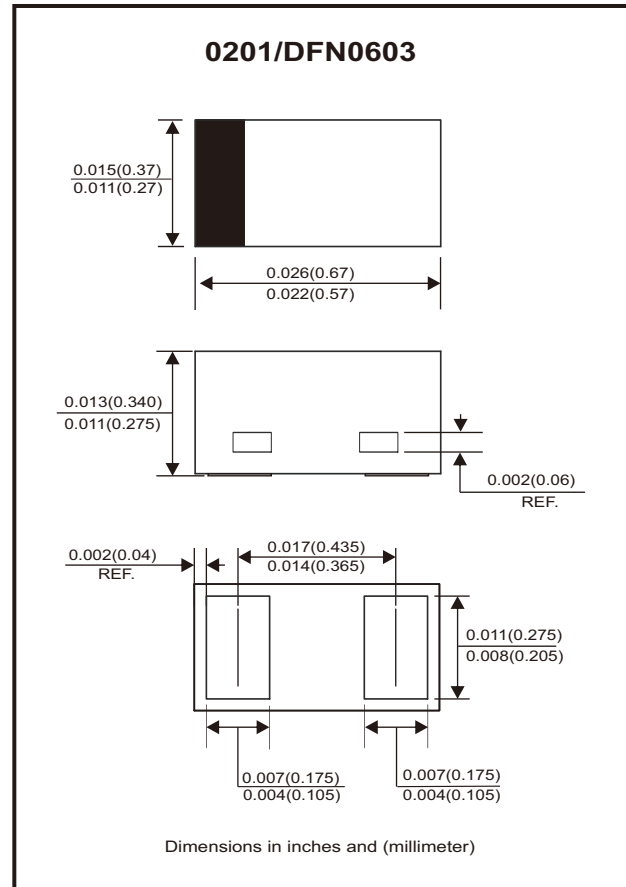
Features

- High Speed.
- Designed for mounting on ultra small surface.
- Extremely thin/leadless package.
- High mounting capability, strong surge withstand, high reliability.
- Low capacitance.

Mechanical data

- Case: 0201/DFN0603 package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any
- Weight: 0.0004 grams(approx.).

Circuit Diagram



Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V_{RRM}			100	V
Reverse voltage		V_R			80	V
Repetitive peak forward current		I_{FM}			300	mA
Average forward current		I_o			100	mA
Non-repetitive peak forward surge current	$T_p=1.0\mu\text{s}$	I_{FSM}			2	A
Power dissipation		P_D			200	mW
Operating temperature range		T_J	-40		+150	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55		+150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1\text{mA}$	V_F		0.61		V
	$I_F = 10\text{mA}$			0.75		V
	$I_F = 100\text{mA}$			0.93	1.2	V
Reverse current	$V_R = 30\text{V}$	I_R			0.3	μA
	$V_R = 80\text{V}$				0.5	μA
Capacitance between terminals	$f = 1\text{MHz}$, and 0 VDC reverse voltage	C_T		0.35	3	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}$, $R_L = 100\ \text{ohms}$ $I_{RR} = 1\text{mA}$	T_{RR}			4	nS

Rating and Typical Characteristic Curves (CDSZC01100-HF)

Fig.1 - Forward Characteristics

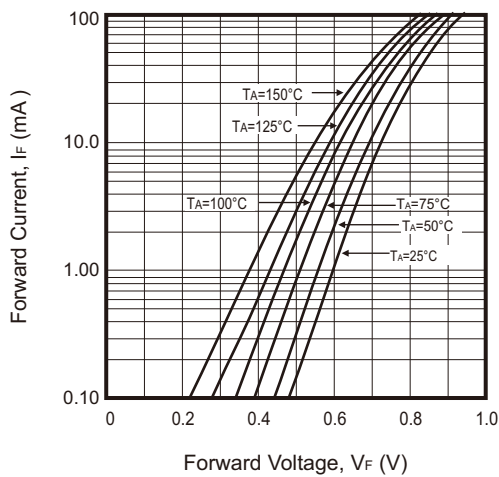


Fig.2 - Reverse Characteristics

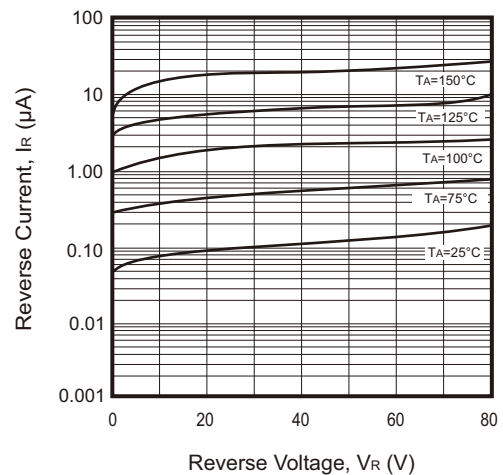


Fig.3 - Capacitance Between Terminals Characteristics

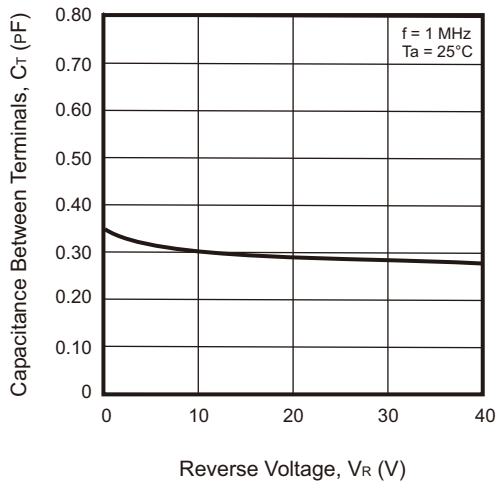
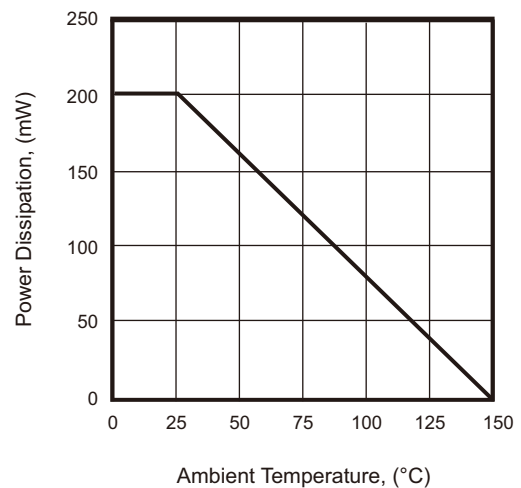
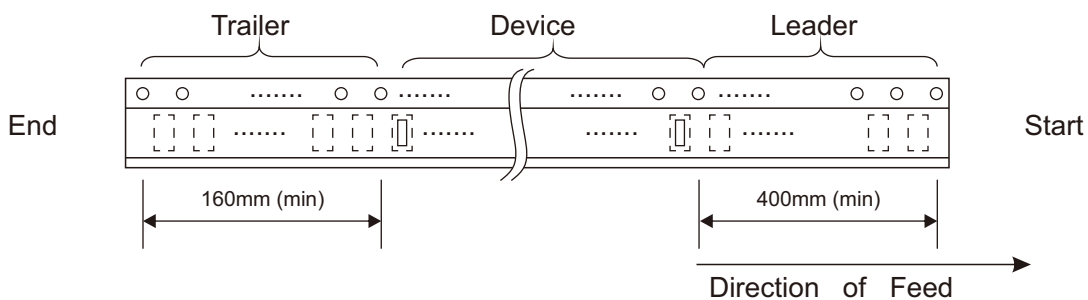
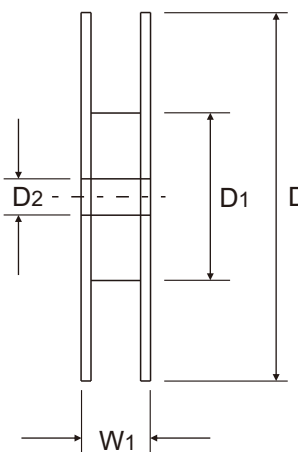
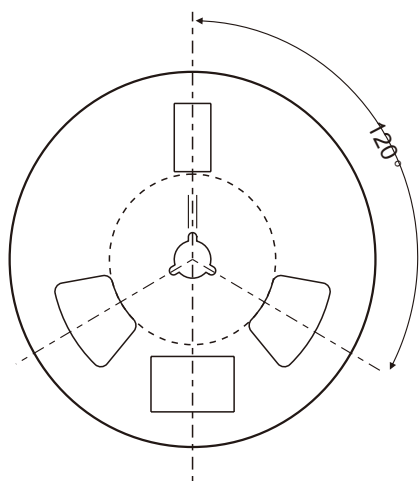
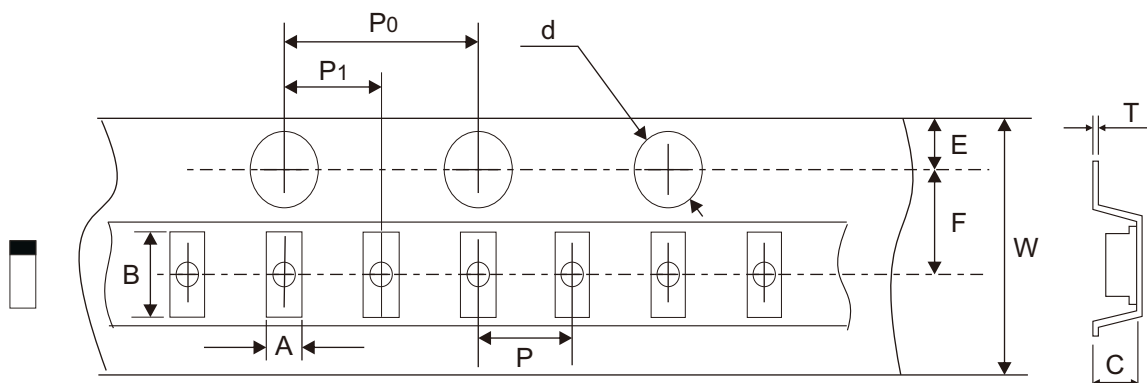


Fig.4 - Power Derating Curve



Reel Taping Specification



0201 (DFN0603)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.44 ± 0.03	0.74 ± 0.03	0.40 ± 0.03	$1.50 + 0.10$ $- 0.00$	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.017 ± 0.001	0.029 ± 0.001	0.016 ± 0.001	$0.059 + 0.004$ $- 0.000$	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

0201 (DFN0603)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.03	$8.00 + 0.30$ $- 0.10$	$12.00 + 0.50$ $- 0.00$
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	$0.315 + 0.012$ $- 0.004$	$0.472 + 0.020$ $- 0.000$

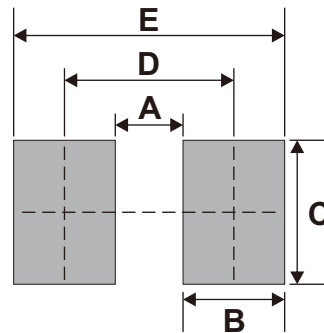
Marking Code

Part Number	Marking Code
CDSZC01100-HF	S



Suggested P.C.B. PAD Layout

SIZE	0201(DFN0603)	
	(mm)	(inch)
A	0.16	0.006
B	0.24	0.009
C	0.34	0.013
D	0.40	0.016
E	0.64	0.025



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0201 (DFN0603)	10,000	7