

## CDSZC01100-HF

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



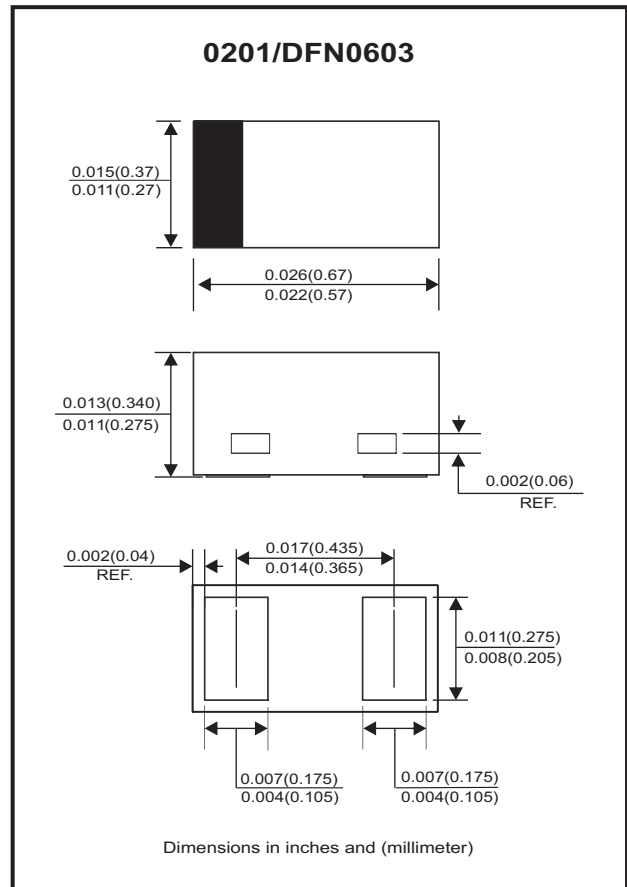
### Features

- 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	$\mu\text{A}$
	$V_R = 80\text{V}$				0.5	$\mu\text{A}$
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

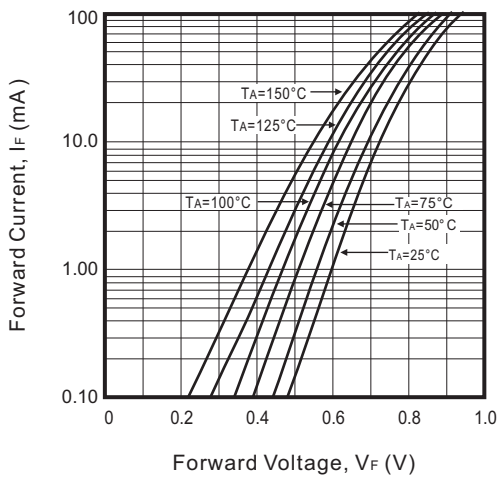


Fig.2 - Reverse Characteristics

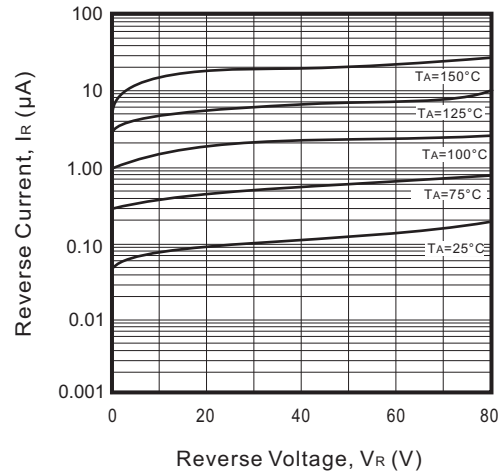


Fig.3 - Capacitance Between Terminals Characteristics

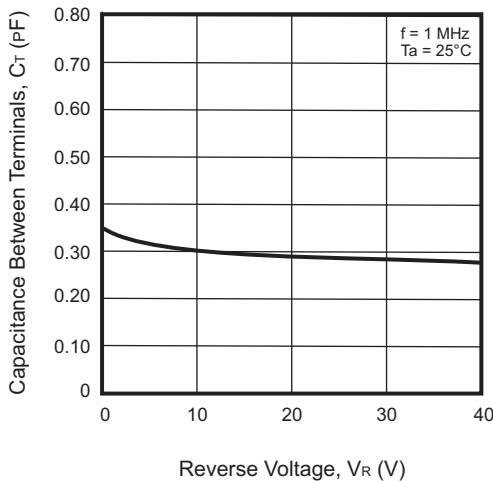
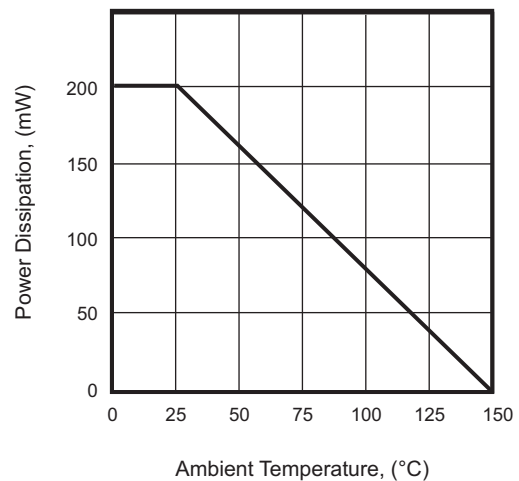
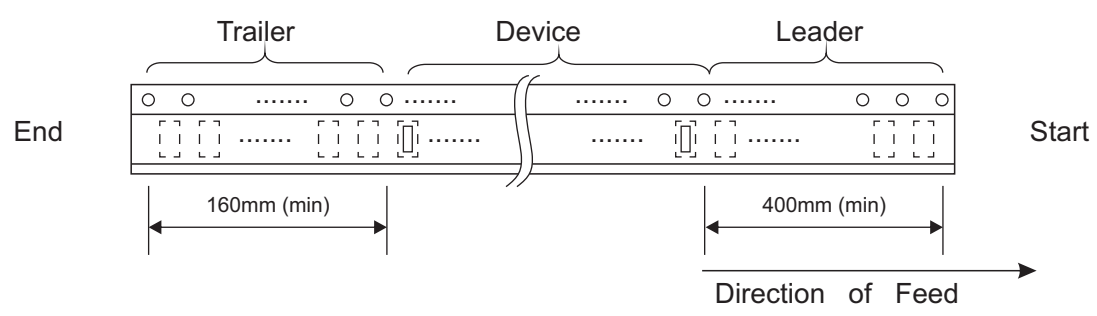
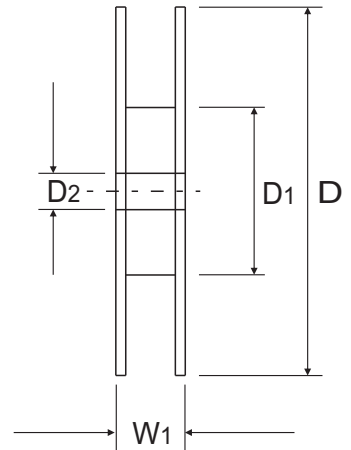
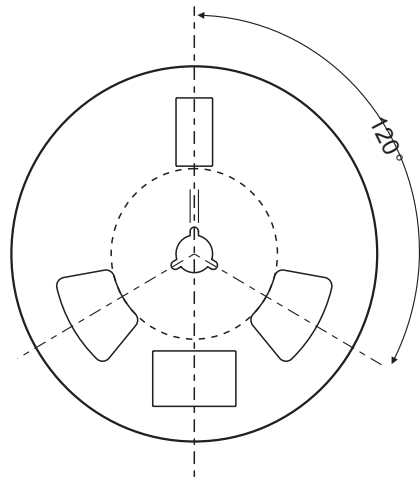
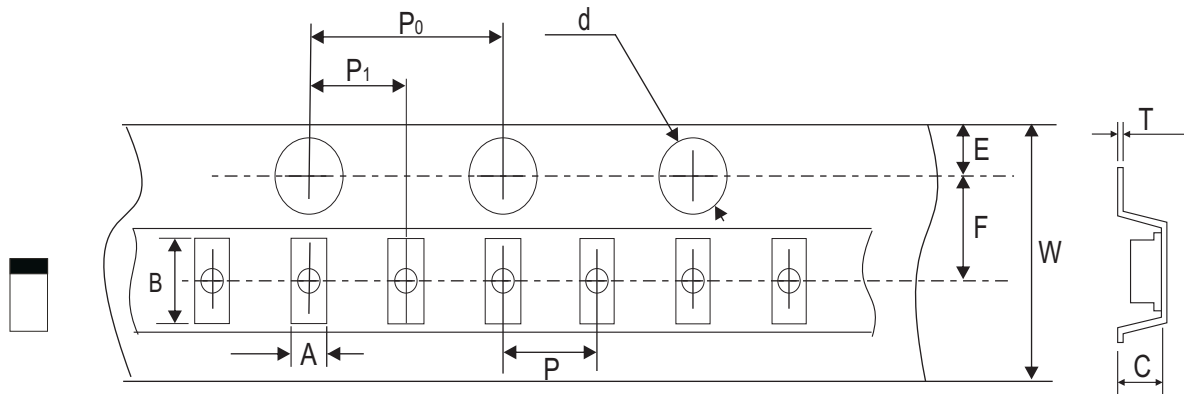


Fig.4 - Power Derating Curve



## Reel Taping Specification



0201 (DFN0603)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.37 ± 0.03	0.67 ± 0.03	0.35 ± 0.03	1.50 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.015 ± 0.001	0.026 ± 0.001	0.014 ± 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	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	8.00 + 0.30 - 0.10	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 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

Company reserves the right to improve product design, functions and reliability without notice.

REV:A

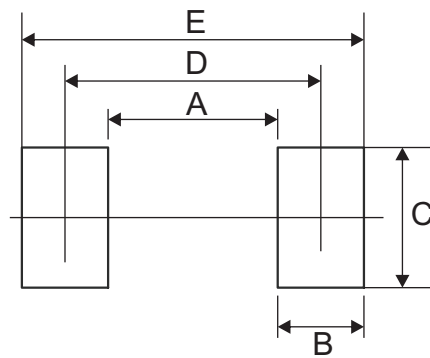
## Marking Code

Part Number	Marking Code
CDSZC01100-HF	S



## Suggested 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	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0201(DFN0603)	10,000	7

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