

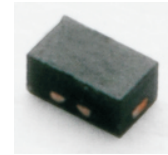


**THE DATASHEET OF  
CDSZ01100-HF**



## CDSZ01100-HF

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



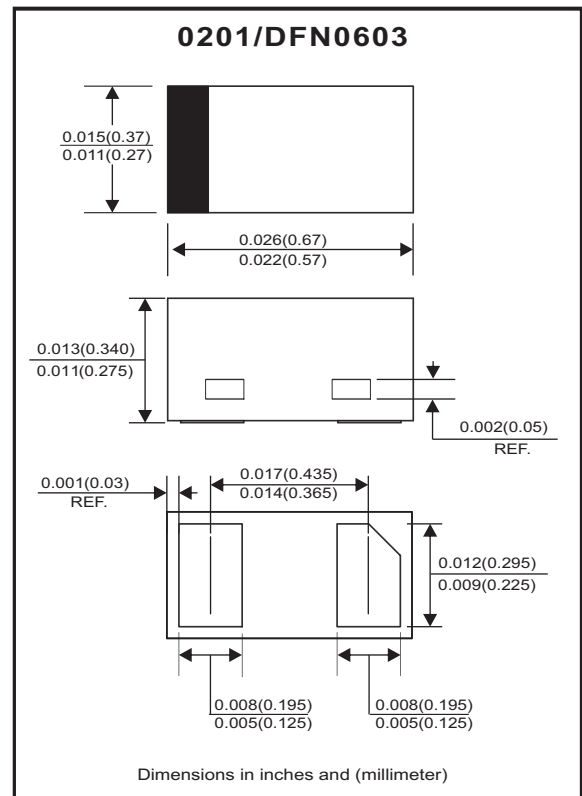
### Features

- 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 $T_A=25\text{ }^\circ\text{C}$ 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	$T_p=1.0\mu s$	$I_{FSM}$			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 TA=25 °C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 1mA	VF		0.61		V
	IF = 10mA			0.75		V
	IF = 100mA			0.93	1.2	V
Reverse current	VR = 30V	IR			0.3	μA
	VR = 80V				0.5	μA
Capacitance between terminals	f = 1MHz, and 0 VDC reverse voltage	CT		0.35	3	pF
Reverse recovery time	IF = IR=10mA, RL = 100 ohms Irr = 1mA	TRR			4	nS

## RATING AND TYPICAL CHARACTERISTIC CURVES (CDSZ01100-HF)

Fig.1 - Forward Characteristics

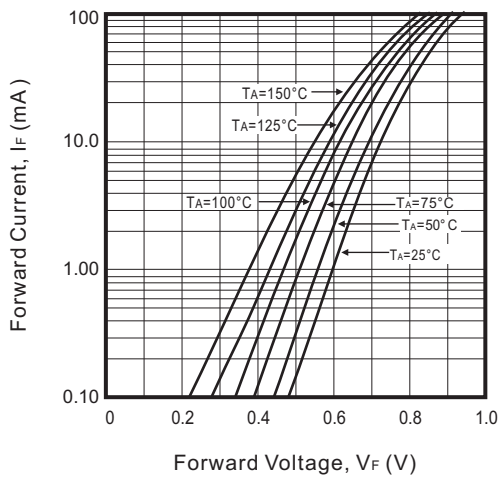


Fig.2 - Reverse Characteristics

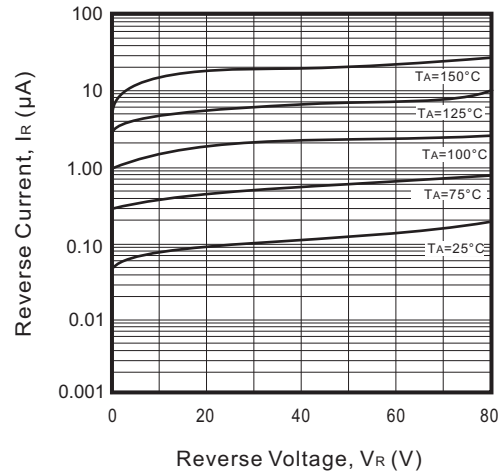


Fig.3 - Capacitance Between Terminals Characteristics

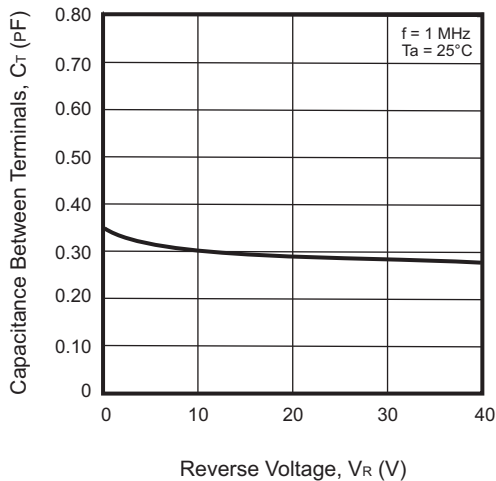
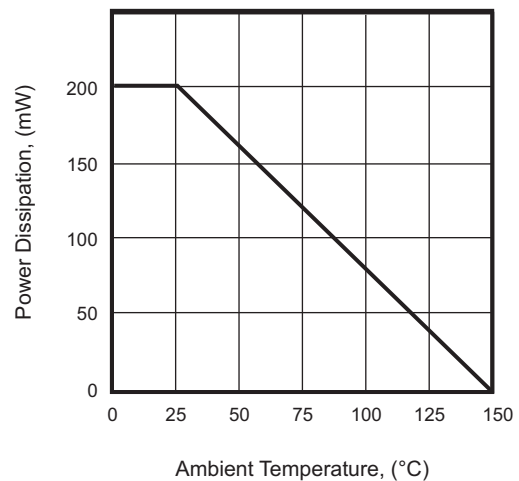
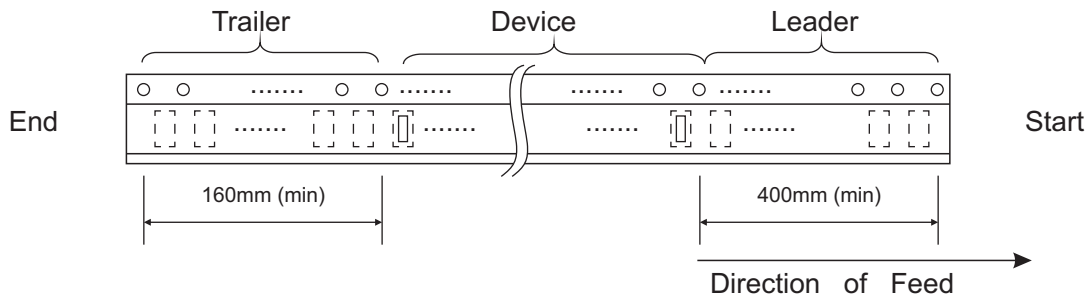
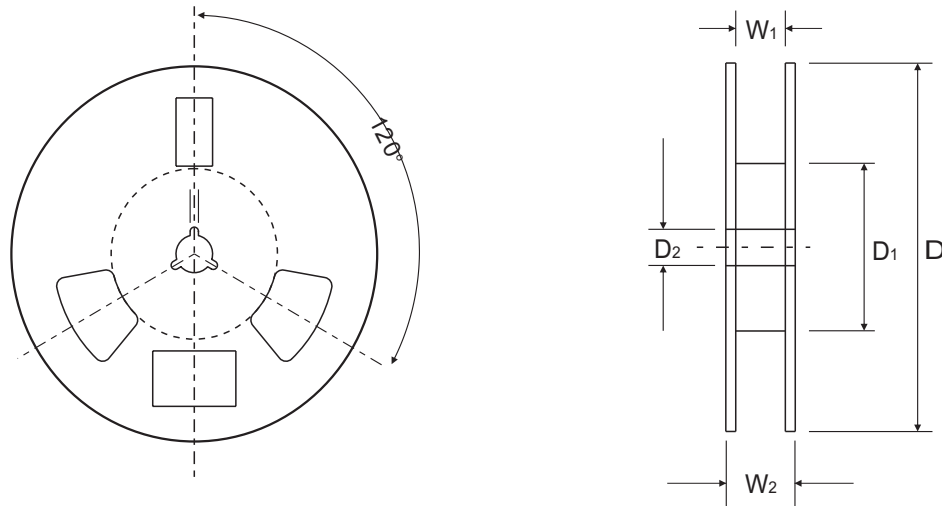
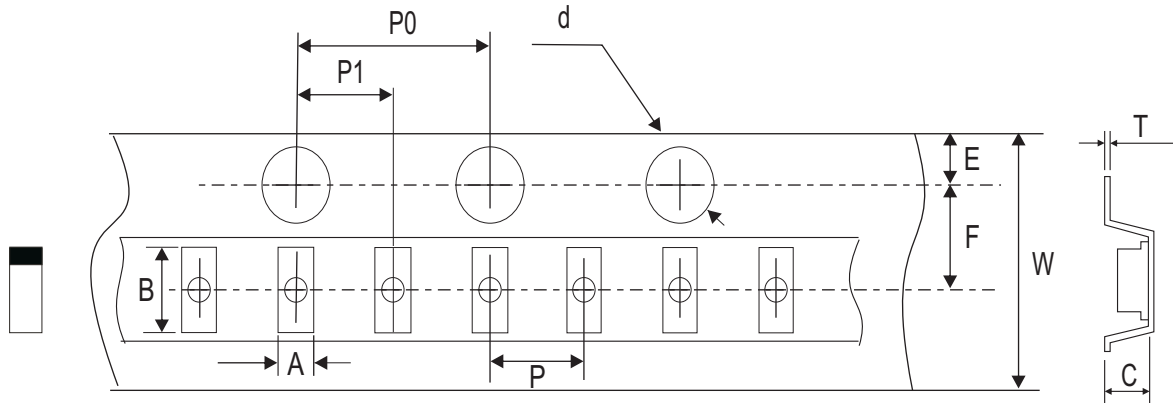


Fig.4 - Power Derating Curve



## Reel Taping Specification



0201 (DFN0603)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>	W
	(mm)	0.39 + 0.03 - 0.02	0.72 ± 0.05	0.36 ± 0.03	1.50 + 0.10	178 ± 1.00	54.4 ± 0.40	13.0 ± 0.20	8.00 ± 0.10
	(inch)	0.015 + 0.001 - 0.001	0.028 ± 0.002	0.014 ± 0.001	0.059 + 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008	0.315 ± 0.004

0201 (DFN0603)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W <sub>1</sub>	W <sub>2</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.05	2.00 ± 0.05	0.23 ± 0.05	9.50 ± 1.00	12.30 ± 0.10
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.002	0.079 ± 0.002	0.009 ± 0.002	0.374 ± 0.039	0.484 ± 0.004

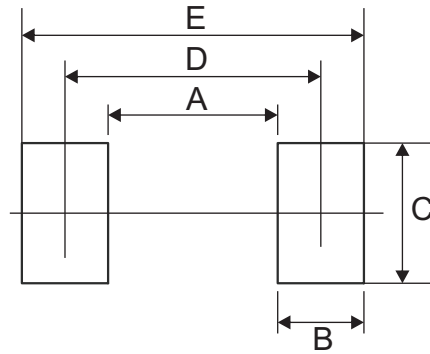
## Marking Code

Part Number	Marking Code
CDSZ01100-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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