

ACPDZC5V0BU-HF

RoHS Device
Halogen Free



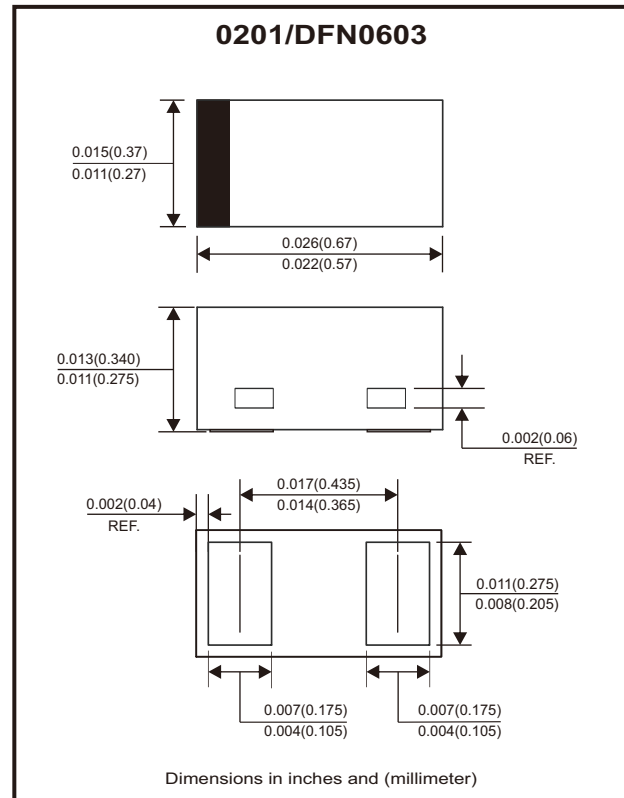
Features

- Uni-directional ESD protection.
- IEC 61000-4-5 (surge) ; Ipp=4A
- IEC 61000-4-2 (ESD) ; ±20KV(contact)
- Low clamping voltage.
- Low leakage current.
- AEC-Q101 Qualified.

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 TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	T _P = 8/20μs	P _{PP}	56	W
Peak pulse current	T _P = 8/20μs	I _{PP}	4	A
ESD capability	IEC 61000-4-2(air)	ESD	±20	kV
	IEC 61000-4-2(contact)	ESD	±20	
Operating temperature range		T _J	-55 ~ +125	°C
Storage temperature range		T _{STG}	-55 ~ +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		V _{RWM}			5	V
Breakdown voltage	I _T = 1mA	V _{BR}	5.8			V
Forward voltage	I _F = 15mA	V _F			1.2	V
Reverse leakage current	V _{RWM} = 5V	I _R			0.1	μA
Clamping voltage	I _{PP} = 1A, T _P = 8/20μs	V _C			10	V
	I _{PP} = 4A, T _P = 8/20μs	V _C		12	14	V
Junction capacitance	V _R = 0V, f = 1MHz	C _J		0.45	0.60	pF

Rating and Characteristic Curves (ACPDZC5V0BU-HF)

Fig.1 - 8/20 μ s Peak Pulse Current Waveform Acc. IEC 61000-4-5



Fig.2 - Power Rating Derating Curve



Fig.3 - Typical Clamping Voltage vs. Peak Pulse Current

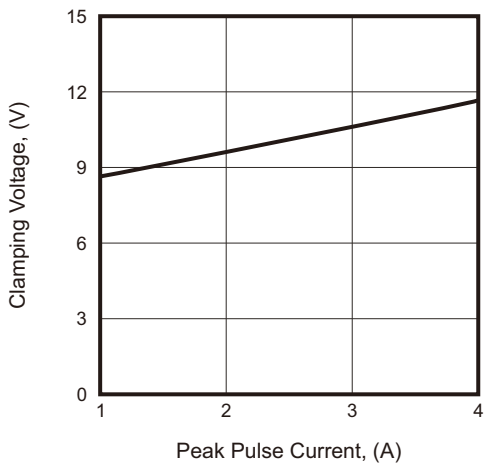
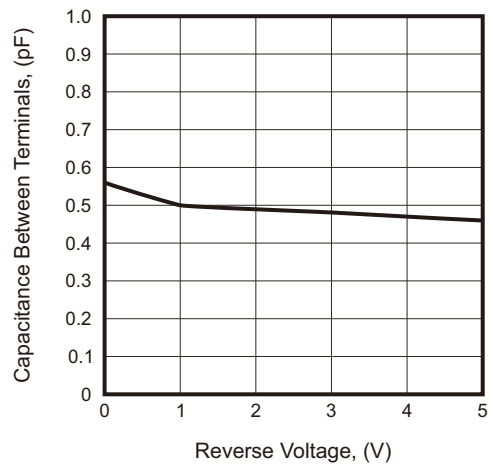
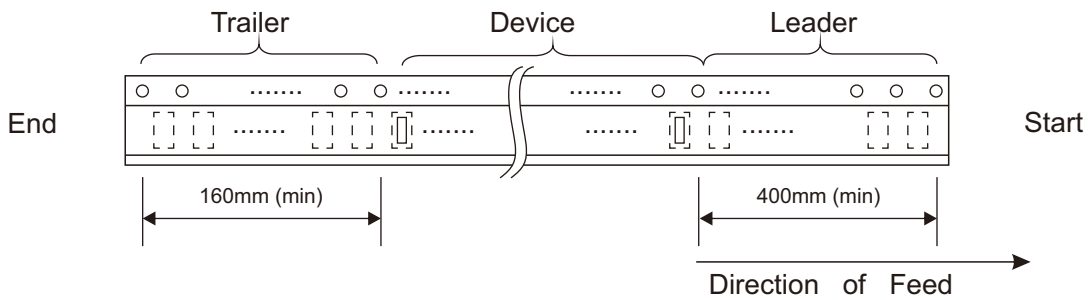
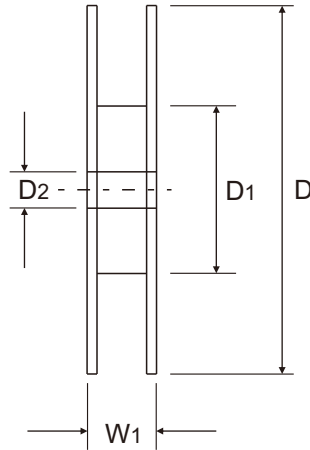
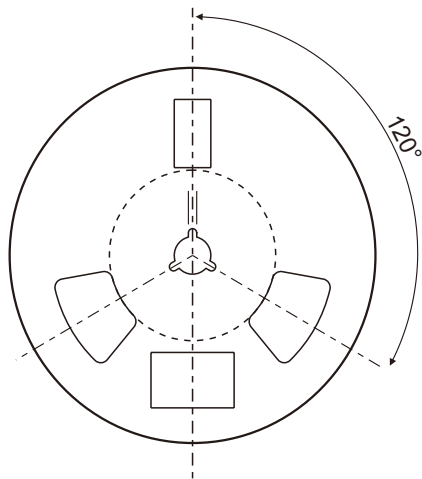
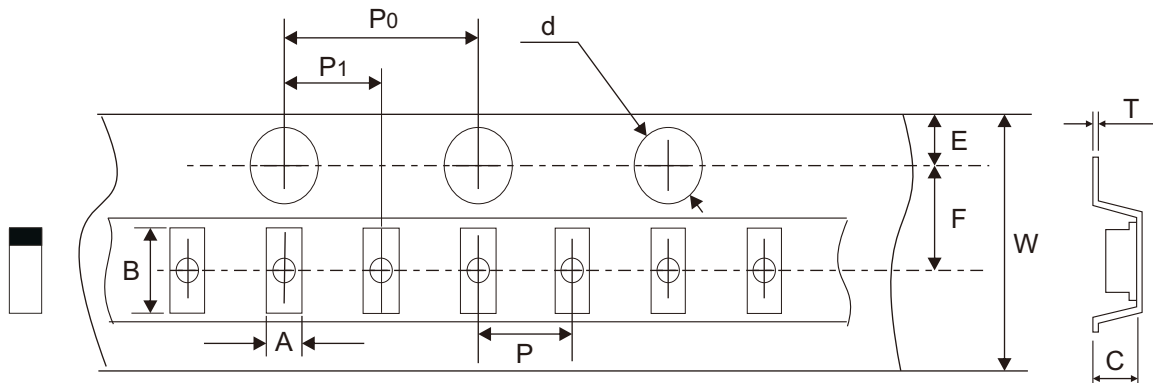


Fig.4 - Typical Capacitance Between Terminals Characteristics



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