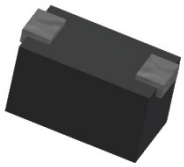
ESD Protection Diode

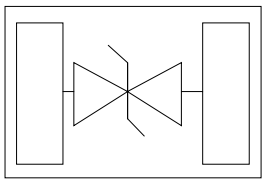
Features

- Capacitance：5.6pF (typ.)
- Reverse working voltage：3.3V
- IEC61000-4-2 (ESD)：±30kV (air)
- IEC61000-4-2 (ESD)：±30kV (contact)
- IEC61000-4-5 (Surge)：5A (8/20μs)
- Marking : T

DFN0603



PIN CONFIGURATION



Main applications

- High Speed Line: USB1.0/2.0, VGA
- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Projection TV
- Cellular handsets and accessories
- Portable instrumentation
- Peripherals

Ordering Information

Device	Qty per Reel	Reel Size
YT0356AF2	15000	7Inch

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

Parameter	Symbol	Test conditions	Limit	Unit
ESD Rating per IEC61000-4-2	V_{ESD}	Contact	±30	kV
		Air	±30	
Peak pulse power	P_{PP}	tp = 8/20 μs	60	W
Peak pulse current	I_{PP}	tp = 8/20 μs	5	A
Operating junction temperature range	T_J		-55~ +150	°C
Storage temperature range	T_{STG}		-55~ +150	°C

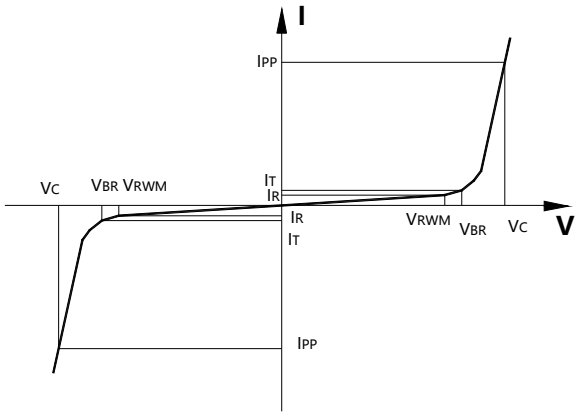
Electrical Characteristics (TA=25°C unless otherwise noted)

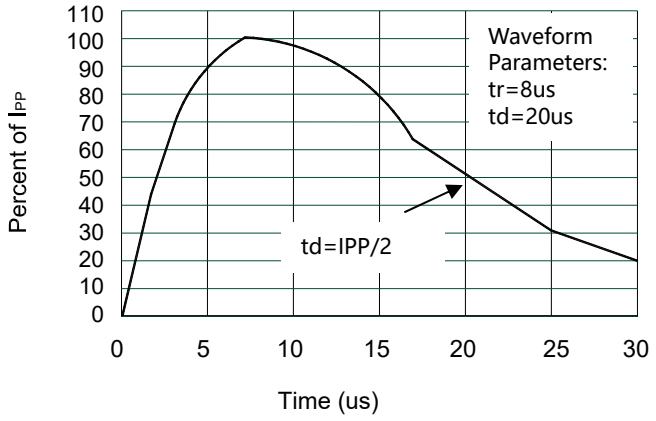
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse working voltage	V_{RWM}	I/O to GND	-	-	3.3	V
Breakdown voltage	V_{BR}	I_T=1mA	3.8	-	-	V
Reverse leakage current	I_R	V_{RWM}=3.3V	-	0.1	1.0	uA
Clamping voltage (8/20us)	V_C	I_{PP}=1A	-	-	7.6	V
Junction capacitance	C_J	V_R=0V, f=1MHz	-	5.6	10	pF

DEVICE CHARACTERISTICS

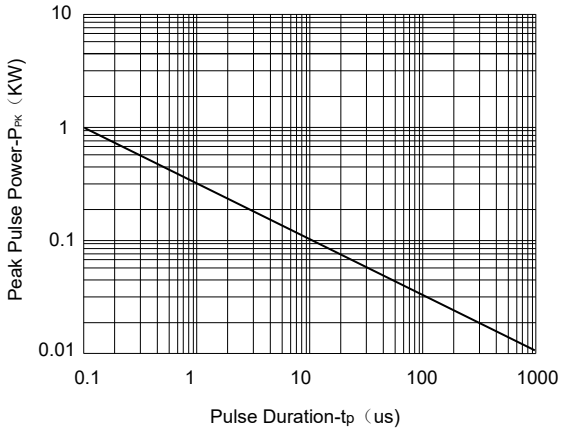
YT0356AF2

Symbol	Parameter
V_{RWM}	Working Peak Reverse Voltage
V_{BR}	Breakdown Voltage @ I_T
V_C	Clamping Voltage @ I_{PP}
I_T	Test Current
I_{RM}	Leakage current at V_{RWM}
I_{PP}	Peak pulse current
C_O	Off-state Capacitance
C_J	Junction Capacitance

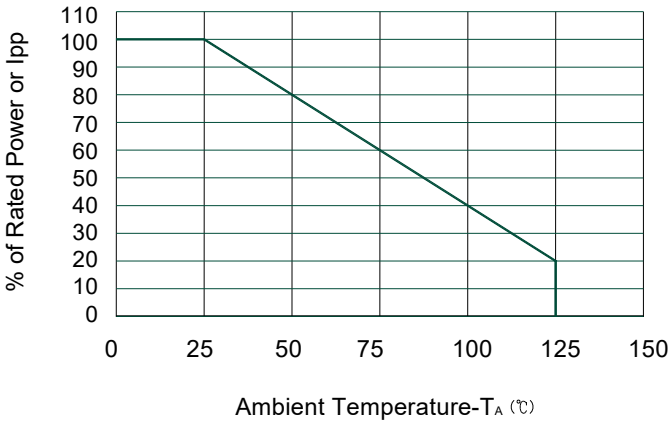




Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time



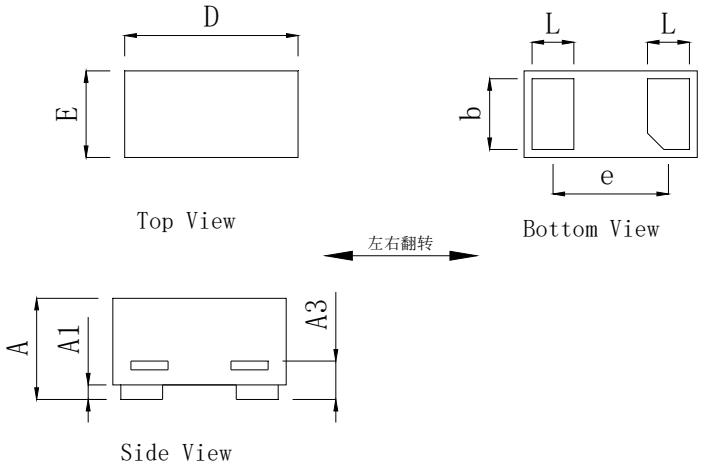
PACKAGE OUTLINE & DIMENSIONS

YT0356AF2

Mechanical Data

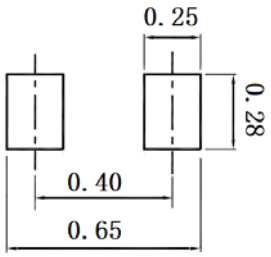
Case: DFN0603

Case Material: Molded Plastic. UL Flammability

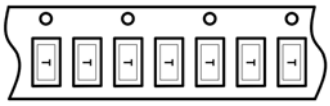


DIM	Millimeters	
	Min	Max
A	0.230	0.330
A1	0.000	0.050
A3	0.102REF	
D	0.550	0.650
E	0.250	0.350
b	0.215	0.275
L	0.115	0.175
e	0.40BSC	

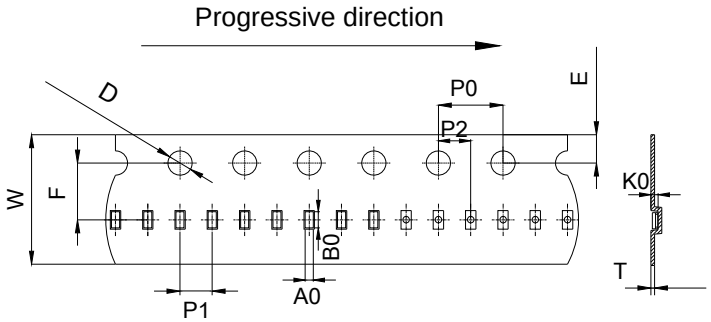
Recommended Pad outline



Device Orientation in Tape



Device Orientation in Tape



PACKAGE	W	E	F	P0	D	P2	P1	T	A0	B0	K0
DFN0603	8mm ±0.1	1.75mm ±0.1	3.5mm ±0.05	4mm ±0.1	1.5mm ±0.1	2mm ±0.05	2mm ±0.1	0.23mm ±0.02	0.34mm ±0.05	0.67mm ±0.05	0.4mm ±0.05