

# ESD Suppressor

## 36V Unidirectional DFN1610

ME361U52V5D1610

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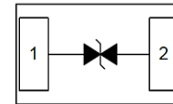
### FEATURE

- IEC61000-4-2 ESD 30KV (Air), 30KV (Contact)
- IEC61000-4-4(EFT) : 40A(5/50ns)
- IEC61000-4-5(Lightning) : 19A(8/20uS)
- Low Clamping Voltage
- Application: USB Voltage Bus, Battery Protection, Digital Lines, Proximity Sensor



### MECHANICAL DATA

- Case: DFN1610-2L Package
- Terminals : Solderable per MIL-STD-750, Method 2026



### MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
ESD Discharge (IEC61000-4-2)	Air	±30	KV
	Contact	±30	
Typical Thermal Resistance	$R_{\theta JA}$	300	°C/W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

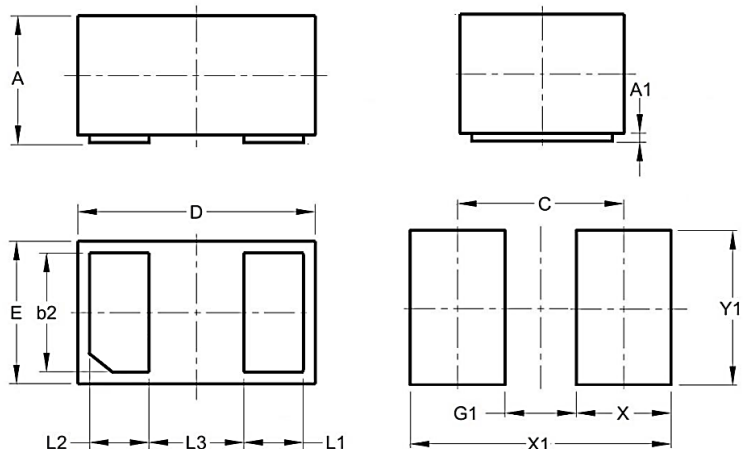
### ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Symbol	Min	Typ.	Max	Units
Reverse Stand-off Voltage	--	$V_{RWM}$	-	-	36	V
Reverse Breakdown Voltage	$I_R=1mA$	$V_{(BR)}$	39.6	-	46.5	V
Reverse Leakage Current	$V_{RWN}=36V$	$I_R$	-	-	1	µA
Maximum Peak Pulse Current	$tp=8/20\mu s$	$I_{PP}$	-	-	19	A
Clamping Voltage ( $tp=8/20\mu s$ )	$I_{PP}=1A$	$V_C$	-	-	52.5	V
	$I_{PP}=19A$		-	-	75	
Off State Junction Capacitance	$V_{dc}=0, f=1MHz$	$C_J$	-	-	190	pF

- Note:
1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
  2. A transient suppressor is selected according to the working peak reverse voltage ( $V_{RWM}$ ), which should be equal to or greater than the DC or continuous peak operation voltage level.

### DIMENSIONS

Item	Min (mm)	Max (mm)
A	0.450	0.550
A1	0.000	0.050
b2	0.750	0.850
D	1.550	1.650
E	0.950	1.050
L1	0.350	0.450
L2	0.350	0.450
L3		1.100
C		1.225
G1		0.600
X		0.625
X1		1.850
Y1		1.000



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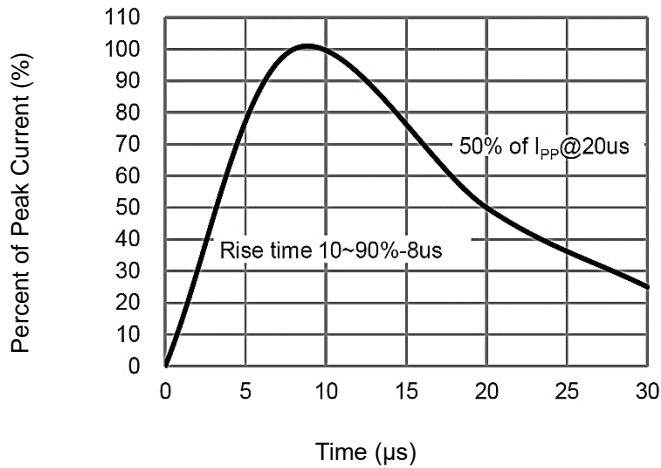
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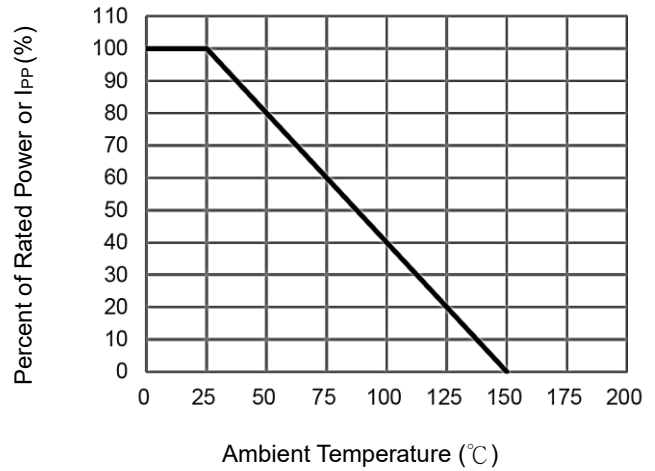
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### CHARACTERISTIC CURVES

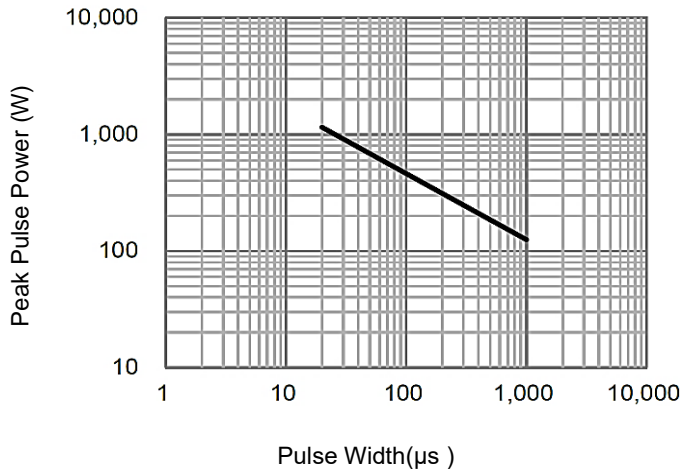
Pulse Wave Form



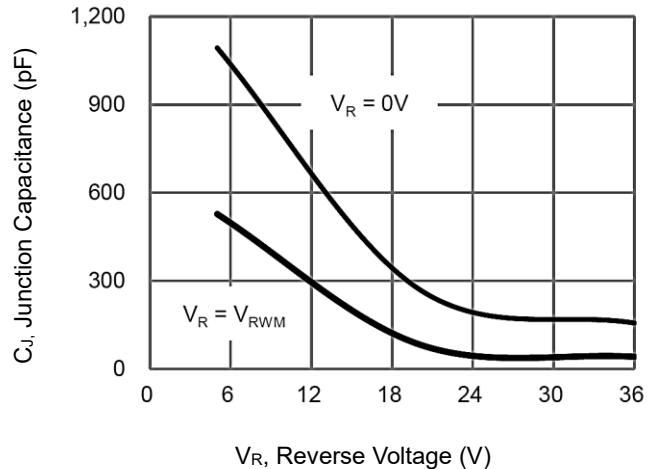
Power Derating Curve



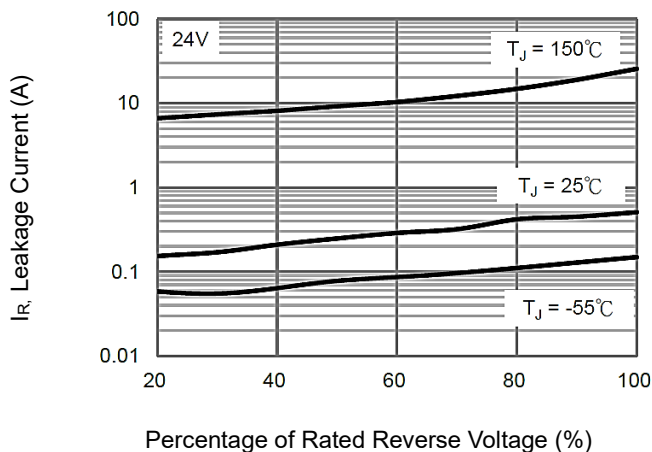
Peak Pulse Power Rating Curve



Junction Capacitance



Typical Reverse Characteristics



Typical Forward Characteristics

