



TRANSIENT VOLTAGE SUPPRESSOR ARRAYS

Features

- 2, 3, 4, 5, or 6 transient voltage suppressors in a single surface-mount package.
- Compact SMT packages save board space and ease layout in space critical applications compared to discrete solutions.
- In-system ESD protection to 20kV contact discharge per IEC 61000-4-2 International Standard.

Applications

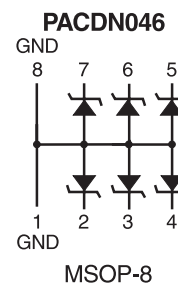
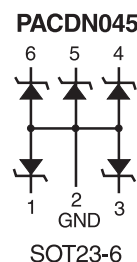
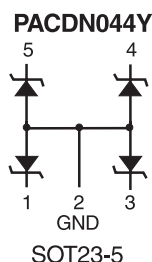
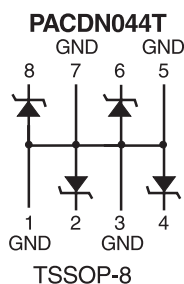
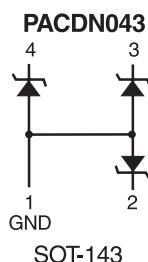
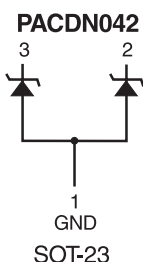
- ESD protection of PC ports, e.g. USB port.
- Protection of interface ports or IC pins which are exposed to high levels of ESD.

Product Description

The PACDN042, PACDN043, PACDN044, PACDN045, and PACDN046 are transient voltage suppressor arrays that provide a very high level of protection for sensitive electronic components that may be subjected to electrostatic discharge (ESD). The devices are designed and characterized to safely dissipate ESD strikes at levels well beyond the maximum requirements set forth in the IEC 61000-4-2 International Standard (Level 4, 8kV contact discharge). All pins are rated at 20kV ESD using the IEC 61000-4-2 contact discharge method.

Using the MIL-STD-883D (Method 3015) specification for Human Body Model (HBM) ESD, all pins are protected for contact discharges to greater than 30kV.

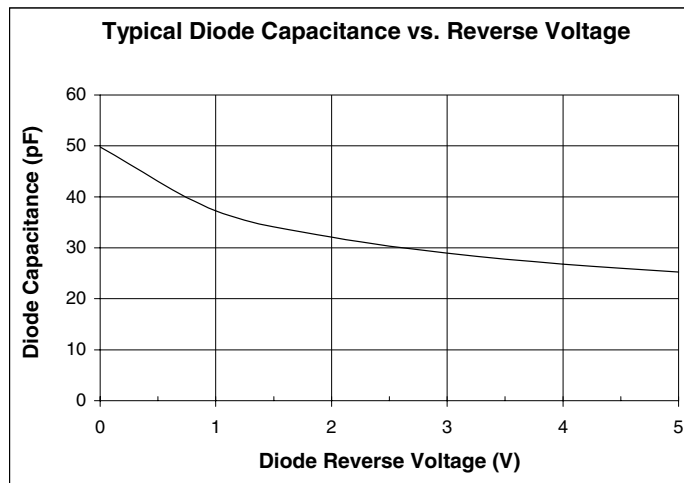
Schematic Configurations



STANDARD SPECIFICATIONS				
Parameter	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage, $I = 10\mu A$	5.5			V
Signal Clamp Voltage:				
Positive Clamp, 10mA	5.6	6.8	8.0	V
Negative Clamp, 10mA	-1.2	-0.8	-0.4	V
In-system ESD withstand voltage*:				
Human Body Model (MIL-STD-883D, method 3015)	±30			kV
IEC 61000-4-2, contact discharge method	±20			kV
Clamping voltage during ESD discharge				
MIL-STD-883D (Method 3015), 8kV		12		V
Positive		-8		V
Negative				
Capacitance @ 2.5V dc, 1 MHz		30		pF
Temperature Range:				
Operating	-40		85	°C
Storage	-65		150	
Package Power Rating:				
SOT23, SOT23-5, SOT-143			0.225	W
TSSOP, MSOP			0.5	W

* ESD applied between channel pin and ground, one at a time. All other channels are open. All GND pins grounded. This parameter is guaranteed by design and characterization..

Note: 'GND' in this document refers to the lower supply voltage.



STANDARD PART ORDERING INFORMATION		
Package		Ordering Part Number
Pins	Style	
3	SOT23	PACDN042Y3
4	SOT143	PACDN043Y4
5	SOT23-5	PACDN044Y5
6	SOT23-6	PACDN045Y6
8	TSSOP	PACDN044T
8	MSOP	PACDN046M

When placing an order please specify desired shipping: Tubes or Tape & Reel.