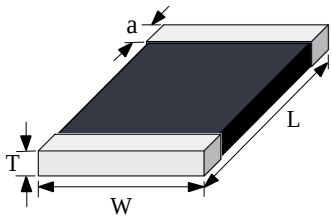
PolyDiode™ RoHS

PolyDiode Automotive A Series

Dimensions



DIM.	CHIP SIZE (mm)				
	0805	1206	1210	1812	2220
$T_{max.}$	1.20	1.60	1.80	1.80	3.00
a	0.40±0.25	0.50±0.25	0.50±0.25	0.50±0.25	0.75±0.25
L	2.00±0.20	3.20±0.20	3.20±0.30	4.50±0.35	5.70±0.40
W	1.25±0.15	1.60±0.20	2.50±0.30	3.20±0.30	5.00±0.40

Multilayer Ceramic Automotive Transient Voltage Suppressor

Features

- As JumboTek's electrical advantages and physical Advantages <For More> 2005.12.22
- Bidirectional clamping in a two pin device
- No polarity, suitable for uni- and bidirectional lines
- Adequate to replace a silicon TVS diode + EMC capacitor combination.
- Reducing board space and mounting cost
- Capable of withstanding numerous ESD strikes
- RoHS compliant

Applications examples

- absorption of switching surge from various kinds Of relay.trumpet.motors and electro-magnetic valves
- Electrostatic discharge and spike noise suppression
- Protect the electronic systems such as anti-lock brake Systems. direct ignition systems. airbag control systems.wiper motor control and semiconductors of automobile

WebLinks

Further infos see:
www.jumbotek.com
Further technical infos
Please E-mail: service@jumbotek.com

Specifications

Packaging
Tape and Reel
T 7 inch reel
0805 ~ 1206 (3,000 pcs.)
1210 (2,000 pcs.)
1812 ~ 2220 (1,000 pcs.)

Material
Body: Semiconducting Ceramic
Terminals: Ni/Sn plated (code "P")

Operating Temperature
-55 to +125℃

Solderability
acc. to IEC 60068-2-58
235℃, 2 sec.

Soldering Heat Resistance
260℃, 10 sec. (IEC 60068-2-58)
280℃, 5 sec. (IEC 60068-2-58)

Response Time
<0.5ns

Temperature coefficient (αV) of clamping voltage (Vc) @ specified test current
<0.01%/ ℃

Power dissipation
0805~1206 0.1 W max. 1210 0.15 W max.
1812 0.3 W max. 2220 1.0 W max.

Standards
MIL-STD-750 SAE-J1113
AEC-Q200

Type	Maximum Ratings (125℃)				Specifications (25℃)		
	max. cont. working voltage	Jump start voltage (max 5min)	load dump energy (10 pulses)	max. Clamping voltage at spec Contact (8/20 μs)	Nominal voltage at 10mA (DC) test current		typ. capacitance 1MHz
	$V_{M(Dc)}$ (V)	V_{Jump} (V)	W_{LD} (J)	V_C (V@A)	$V_{N(DC)min.}$ (V)	$V_{N(DC)max.}$ (V)	$C_{typ.}$ (pF)
PD05S180A651PT	18.0	24.0	1.0	40.0@ 1.0	22.0	28.0	650
PD06S180A901PT	18.0	24.0	1.5	40.0@ 1.0	22.0	28.0	900
PD10S180A272PT	18.0	24.0	3.0	40.0@ 2.5	22.0	28.0	2700
PD12S180A452PT	18.0	24.0	6.0	40.0@ 5.0	22.0	28.0	4500
PD12S380A302PT	38.0	50.0	6.0	77.0@ 10.0	42.3	51.7	3000
PD20S180A113PT	18.0	24.0	25.0	40.0@ 10.0	22.0	28.0	11000
PD20S380A402PT	38.0	50.0	30.0	77.0@ 10.0	48.5	56.0	4000

How to order

PD	05	S	180	A	651	P	T
Type code PolyDiode	Chip Size 05= EIA0805 06= EIA1206 10= EIA1210	Single Chip	Working voltage 180=battery voltage 12V use 380=battery voltage 24V use	Automotive application	Capacitance Code 651= $65x10^1$ 901= $90x10^1$ 272= $27x10^2$	Termination Code P: Electroplating by Ni/Sn	Packing Code T: Tape&Reel B: Bulk