

ECTHCAG4V5U

High Power TVS Diode

The ECTHCAG4V5U is a high power TVS, utilizing leading monolithic silicon technology to provide fast response time and low ESD clamping voltage, making this device an ideal solution for protecting voltage sensitive lines. The ECTHCAG4V5U Series complies with the IEC 610002 (ESD) standard with $\pm 30\text{kV}$ air and $\pm 30\text{kV}$ contact discharge. It is assembled into a 3pin DFN20203 package. The leads are finished with NiPdAu. Each device will protect one line. The combination of small size, and high surge capability makes them ideal for use in applications such as cellular phones, LCD displays, USB, and multimedia card interfaces.

Features

- Protects one I/O lines
- Working voltages : 4.5V
- 4000W peak pulse power (8/20 μs)
- Low leakage current
- Response Time is < 1 ns
- Meets MSL 1 Requirements
- Solid-state silicon avalanche technology
- ROHS compliant



DFN2020-3L

Main applications

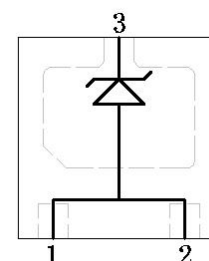
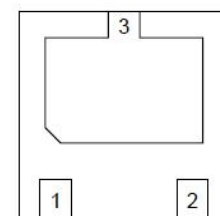
- Power Management
- Industrial Application
- Power Supply Protection

Protection solution to meet

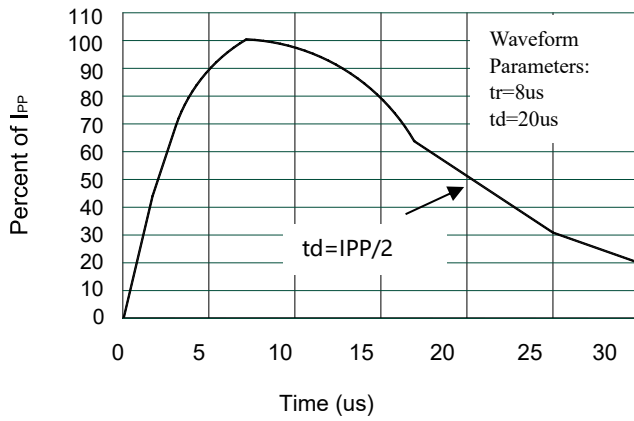
- IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 230A (8/20 μs)

Ordering Information

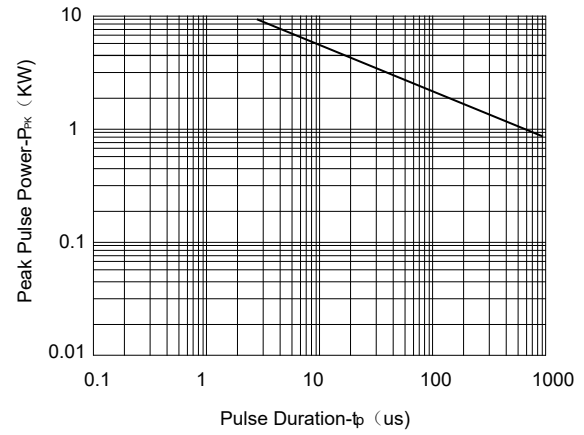
Device	Qty per Reel	Reel Size
ECTHCAG4V5U	3000	7 Inch



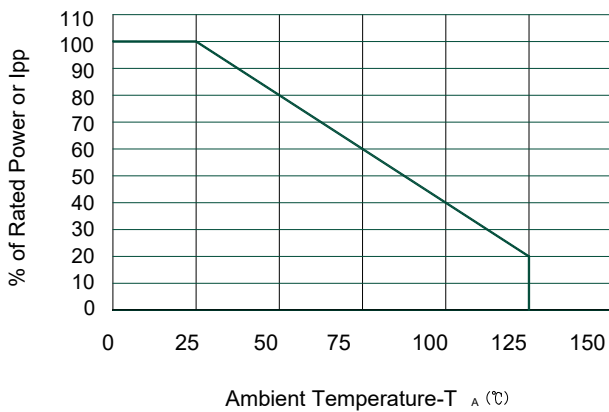
Typical electrical characterist applications



Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve

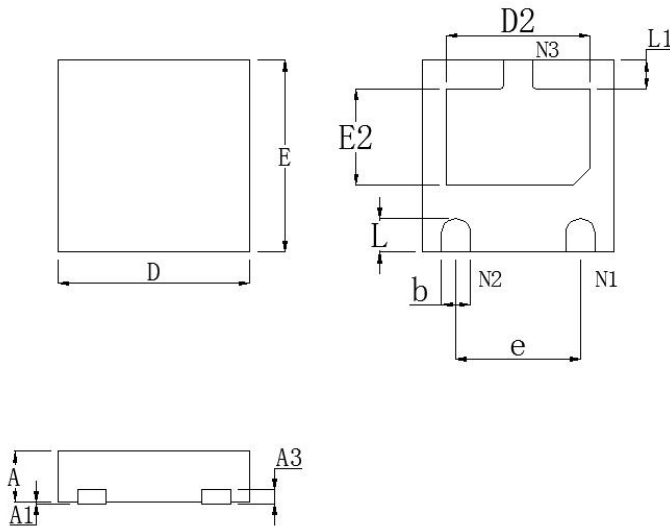
Package Information

DFN2020-3L

Mechanical Data

Case:DFN2020

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		
	Min	Nom	Max
A	0.50	0.55	0.60
A1	0.00	—	0.05
A3	0.15 REF.		
D	1.95	2.00	2.05
E	1.95	2.00	2.05
b	0.25	0.30	0.35
L	0.30	0.35	0.40
L1	0.25	0.30	0.35
D2	1.35	1.50	1.60
E2	0.85	1.00	1.10
e	1.30 BSC		

Recommended Pad outline

