

Description

The AU0504S3-5L is a low capacitance TVS array, 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 high-speed data lines. The AU0504S3-5L has low capacitance with a typical value at 8pF, and complies with the IEC 61000-4-2 (ESD) with ±15kV air and ±8kV contact discharge. It is assembled into a 5-pin lead-free SOT-353 package. The combination of small size, low capacitance and high level of ESD protection makes it ideal for cellular, notebooks, desktops, and other portable application.

Features

Low capacitance: 3pF typical (I/O to I/O)

Ultra low leakage: nA levelLow operating voltage: 5V

Low clamping voltage

• Up to 4 lines protects

JEDEC SOT-353 package

Complies with following standards:

IEC 61000-4-2 (ESD) immunity test
 Air discharge: ±15kV

Contact discharge: ±8kV

RoHS Compliant

Mechanical Characteristics

Package: SOT-353Lead Finish: Matte Tin

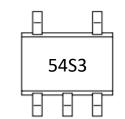
Case Material: "Green" Molding Compound.Terminal Connections: See Diagram Below

Marking Information: See Below

Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, LCD Displays

Marking Information

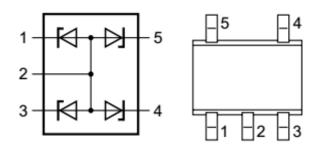


54S3 = device marking code

Order-

ing Information

Dimensions and Pin Configuration



Circuit Schematic

Pin Schematic

Part Number	Packaging	Reel Size
AU0504S3-5L	3000/Tape & Reel	7 inch



Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit	
ESD per IEC 61000-4-2 (Air)	VEOD	±15	127	
ESD per IEC 61000-4-2 (Contact)	VESD	±8	kV	
Operating Temperature Range	TJ	−55 to +125	°C	
Storage Temperature Range	Tstg	−55 to +150	°C	

Electrical Characteristics (T_A=25°C unless otherwise specified)

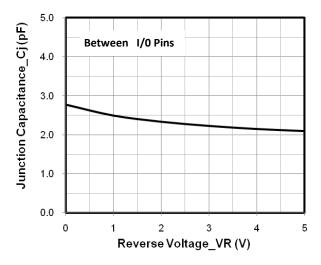
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Breakdown Voltage	VBR	6			V	IT = 1mA, any I/O to GND
Reverse Leakage Current	I _R			0.2	μΑ	VRWM = 5V
Clamping Voltage	Vc			10.5	٧	IPP = 1A (8 x 20μs pulse)
Junction Capacitance	CJ			10	pF	VR = 0V, f = 1MHz, any I/O to GND

Note 1: I/O pins are 1, 3, 4, 5

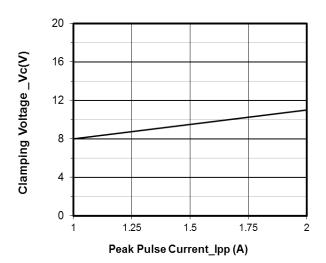
GND pin are 2



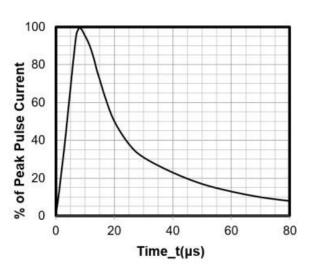
Typical Performance Characteristics (T_A=25°C unless otherwise Specified)



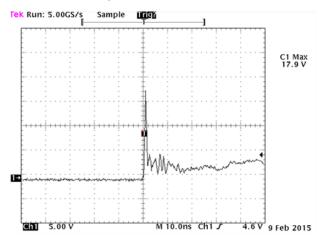
Junction Capacitance vs. Reverse Voltage



Clamping Voltage vs. Peak Pulse Current (tp = 8/20us)



8 X 20µs Pulse Waveform



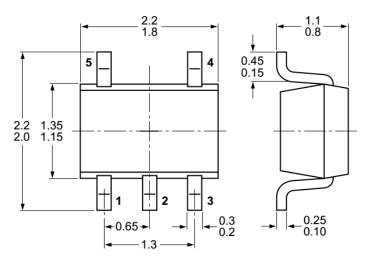
Note: Data is taken with a 10x attenuator

ESD Clamping Voltage

+8 kV Contact per IEC61000-4-2



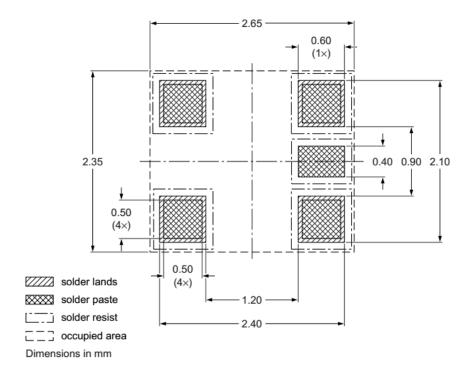
SOT-353 Package Outline Drawing



Dimensions in mm

Suggested Land

Pattern



Contact Information

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