

25 Mil Pitch, IEEE 1284 Termination Network Resistor, Capacitor, Diode



Product is pictured larger than actual size to show detail

Vishay has upgraded the standard IEEE 1284 Thin Film technology Network, incorporating diodes for protecting the inputs/outputs from electro-static discharge (ESD).

The sophisticated circuit is housed in a standard QSOP, 28-pin package.

Uses include ECP/EPP parallel port terminations for PC peripherals, notebooks, desktops, workstations and servers. This is a guaranteed stock part.

FEATURES

- Lead (Pb)-free standard
- One sophisticated, integrated Thin Film technology solution
- Up-graded IEEE 1284 parallel port termination, pull-up with the addition of diodes for filtering on the parallel port
- Standard QSOP package (28 pins) - JEDEC mo-137AF
- 17 terminating lines
- Reduces total cost
- Increase board utilization
- Better performance over discretes



RoHS
COMPLIANT

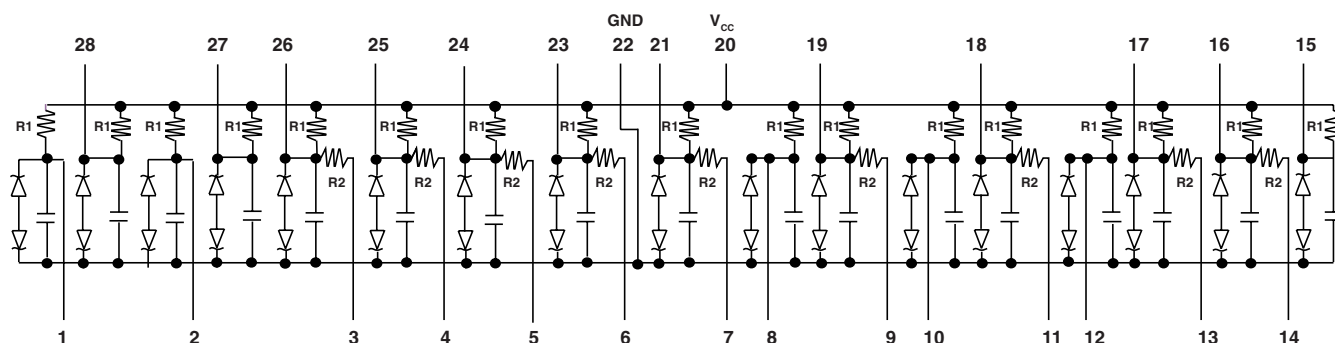
STANDARD ELECTRICAL SPECIFICATIONS

Absolute Tolerance (R)	± 10 %
Absolute Tolerance (C)	± 20 %
Power Rating	Per Resistor 100 mW Per Package 1 W
Signal Clamp Voltage	(+) Clamp > 6 V (-) Clamp < - 6 V
Maximum Leakage Current at V _{CC} Max	1 µA at 25 °C
Operating Temperature	0 °C to + 70 °C
Storage Temperature	- 65 °C to + 150 °C

MECHANICAL SPECIFICATIONS

R/C Element	Polysilicon/Thin Film
Substrate Material	Silicon
Body	Molded Epoxy
Terminals	Copper Alloy
Plating	100% Sn Matte
Lead Coplanarity	0.005 Inches
Marking Resistance to Solvents	MIL-STD-202, Method 15
Flammability	UL94 V-0

SCHEMATIC



ESD PROTECTION

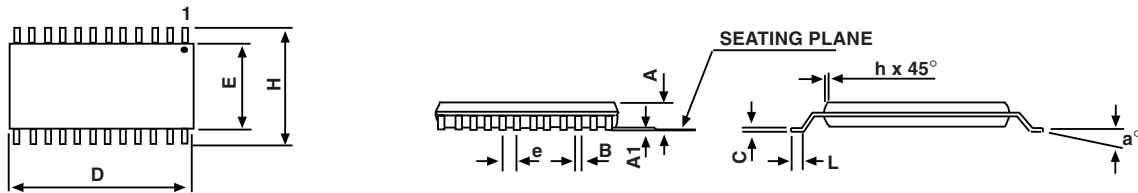
	MAX.	MIN.
Peak Discharge Voltage at any I/O, Human Body Model, Method 3015 ⁽¹⁾	+ 8 kV	- 4 kV
In System Protection HBM ⁽²⁾	+ 15 kV	- 8 kV
In System Protection, IEC 1000-4-2, Level 2 ^{(2) (3)}	+ 8 kV	- 4 kV
Channel Clamp Voltage at 8 kV ESD Pulses, HBM ^{(1) (2)}	+ 30 V	- 30 V

Notes

⁽¹⁾ Human Body Model per MIL-STD-883, Method 3015 $C_{\text{Discharge}} = 100 \text{ pF}$, $R_{\text{Discharge}} = 1.5 \text{ kW}$ pin 20 at 5 V and pin 22 at ground

⁽²⁾ Pin 22 grounded, pin 20 to V_{CC} all other pins are open. ESD contact discharge between ground and Pins 1, 2, 8, 10, 12, 15, 16, 17, 18, 19, 21, 23 through 28, one at a time.

⁽³⁾ Standard IEC 1000-4-2 with $C_{\text{Discharge}} = 150 \text{ pF}$, $R_{\text{Discharge}} = 330 \text{ W}$ pin 20 at 5 V and pin 22 at ground

DIMENSIONS AND IMPRINTING in inches and millimeters


MODEL	A	A1	B	C	D	E	e	H	h	L	a°
Inches max.	0.068	0.008	0.012	0.010	0.394	0.157	0.025	0.244	0.016	0.038	8
Millimeters max.	1.727	0.203	0.305	0.254	10.008	3.988	0.635	6.198	0.406	0.889	

Note Mold flash not included in body dimensions.
JEDEC MO137 Package

AVAILABLE MODELS

	R1 (Ω)	R2 (Ω)	C (pF)
VSSX1284A	4.7K	33	180
VSSX1284B	2.2K	33	220

GLOBAL PART NUMBER INFORMATION

Global Part Numbering: VSSX1284ATF

V S S X 1 2 8 4 A T F

SPECIFY MODEL

VSSX1284A
or
VSSX1284B

PACKAGING

UF = TUBED
TAPE AND REEL
TF = full reels



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