



DIODES

VESD09A4A-HSF

4-Line (Quad) ESD Protection Diode Array With Low Load Capacitance of 6 pF



KEY BENEFITS

- Low load capacitance 6 pF
- Low leakage current < 0.1 μ A
- Compact LLP75-6L package with low height < 0.6 mm

APPLICATIONS

- 4-line ESD data port protection in space-limited mobile electronics, such as portable gaming systems, MP3 players, and cell phones

RESOURCES

- Datasheet: VESD09A4A-HSF - www.vishay.com/ppg?81834
- For technical questions contact ESDProtection@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



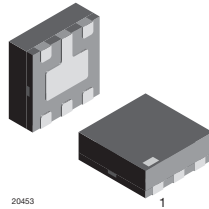
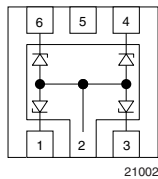
RoHS
COMPLIANT

HALOGEN
FREE

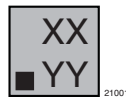
GREEN
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SOLUTIONS™

4-Line (Quad) ESD Protection Diode Array With Low Load Capacitance of 6 pF



MARKING (example only)



Dot = pin 1 marking

XX = date code

YY = type code (see table below)

DESIGN SUPPORT TOOLS

[click logo to get started](#)

3D
Models
Available

FEATURES

- Compact LLP75-6L package
- Low package height < 0.6 mm
- 4-line ESD protection (quad)
- Low leakage current < 0.1 μ A
- Low load capacitance $C_D = 6$ pF
- ESD immunity acc. IEC 61000-4-2 ± 8 kV contact discharge ± 10 kV air discharge
- Surge current acc. IEC 61000-4-5 $I_{PP} > 1.5$ A
- Soldering can be checked by standard vision inspection. No X-ray necessary
- e4 - precious metal (e.g. Ag, Au, NiPd, NiPdAu) (no Sn)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



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ORDERING INFORMATION

DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL (8 mm TAPE ON 7" REEL)	MINIMUM ORDER QUANTITY
VESD09A4A-HSF	VESD09A4A-HSF-GS08	3000	15 000

PACKAGE DATA

DEVICE NAME	PACKAGE NAME	TYPE CODE	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
VESD09A4A-HSF	LLP75-6L	49	4.2 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C

ABSOLUTE MAXIMUM RATINGS VESD09A4A-HSF

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Peak pulse current	BiAs-mode: each input (pin 1, 3 - 5) to ground (pin 2 and 6); acc. IEC 61000-4-5; $t_p = 8/20 \mu$ s; single shot	I_{PPM}	1.5	A
Peak pulse power	BiAs-mode: each input (pin 1, 3 - 5) to ground (pin 2 and 6); acc. IEC 61000-4-5; $t_p = 8/20 \mu$ s; single shot	P_{PP}	30	W
ESD immunity	Contact discharge acc. IEC 61000-4-2; 10 pulses BiAs-mode: each input (pin 1, 3 - 5) to ground (pin 2 and 6)	V_{ESD}	± 8	kV
	Air discharge acc. IEC 61000-4-2; 10 pulses BiAs-mode: each input (pin 1, 3 - 5) to ground (pin 2 and 6)	V_{ESD}	± 10	kV
Operating temperature	Junction temperature	T_J	-40 to +125	°C
Storage temperature		T_{STG}	-55 to +150	°C

Revision: 04-Jan-2019