# MSKSEMI 美森科







TVC



TSS



MOV



GDT



PIFC

# **PESD0402MS07-MS**

**Product specification** 





#### **FEATURES**

- Ultra-Low capacitance:0.05pF(typ.)
- Low leakage current(<10nA)</li>
- Fast response time(<1ns)</li>
- Bi-directional, single line protection
- IEC 61000-4-2 (ESD Air): 15kV
- IEC 61000-4-2 (ESD Contact): 8kV

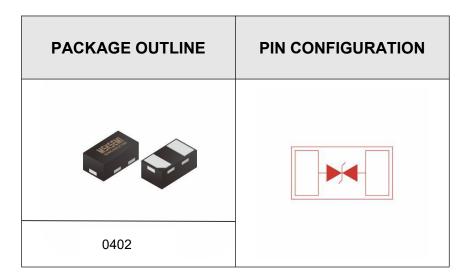
#### **MACHANICAL DATA**

- 0402
- Packaging: Tape and Reel
- Reel size: 7 inch
- 10000PCS/Reel

#### **APPLICATIONS**

- USB 3.0/3. 1
- HDMI 1.3/ 1.4/2.0
- RF Antenna
- SATA and eSATA Interface

#### **Reference News**





## Limiting Values(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
Vesd	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	1	8	k <sub>V</sub>
V 205		IEC 61000-4-2; Air Discharge	-	15	k <sub>V</sub>
TA	Operating Temperature Range	-	-55	125	°C
T <sub>stg</sub>	Storage Temperature Range	-	-40	85	°C

## **ELECTRICAL CHARACTERISTICS (Tamb=25℃)**

Symbol	Parameter	Conditions	Min	Тур.	Max	Unit
VDC	Continuous Operating Voltage	-	-	-	7	V
	Trigger Voltage	IEC61000-4-2 8kV		4.50		,,
VT	Trigger Voltage	contact discharge	-	450	-	V
	Clamping Voltage	IEC61000-4-2 8kV				
VC	Oldmping Voltage	contact discharge	-	40	-	V
	Laskana Cumant	DC 7V shall be applied				
IL	Leakage Current	on component	-	-	10	nA
CJ	Capacitance	Measured at 10 MHz	-	0.05	-	P <sub>F</sub>



## **Typical Characteristics**

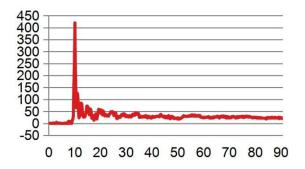


Fig. 1 Typical ESD Response (IEC 61000-4-2, 8kV contact discharge)

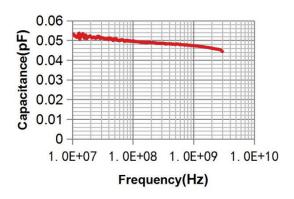


Fig.2 Typical Device Capacitance VS. Frequency

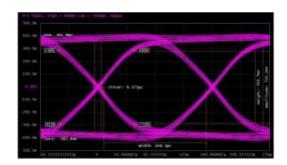
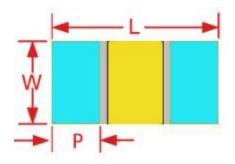


Fig.3 HDMI 2.0 Mask at 6.0 Gbps

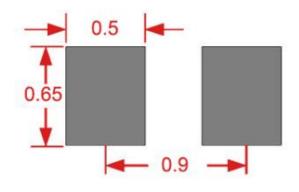


## PACKAGE MECHANICAL DATA





## **Recommended Solder Pad Footprint**



Notes:

This solder pad layout is for reference purposes only.

Dimension	Unit: Millimeters		
	Min	Max	
L	0.90	1. 10	
W	0.42	0.62	
р	0. 15	0.35	
Н	0.25	0.45	

## **REEL SPECIFICATION**

P/N	PKG	QTY
PESD0402MS07-MS	0402	10000



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