# MSKSEMI 美森科













**ESD** 

TV

TSS

MOV

GDT

PLED

# SEUC10F5V4U-MS

**Product specification** 





#### **FEATURES**

- 60Watts peak pulse power (tp = 8/20μs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (Cj=0.2pF typ. I/O to I/O)
- IEC 61000-4-2 ±20kV contact ±25kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20μs)

#### MACHANICAL DATA

- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

#### **APPLICATIONS**

- USB3.0, USB2.0, Ethernet
- HDMI 2.0, Displayport 1.3,eSATA
- Unified Display interface
- Digital Visual Interface

#### **Reference News**

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
	10 9 8 7 6 1	0524P
DFN2510-10L		

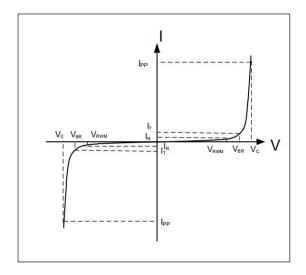


## **ELECTRICAL CHARACTERISTICS CURVE**

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				5.0	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	6.0			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V, T=25C			1	μА
Peak Pulse Current	I <sub>PP</sub>	tp =8/20μs			4	А
Clamping Voltage	Vc	I <sub>PP</sub> =4A,t <sub>p</sub> =8/20μs			15	V
Junction Capacitance	C <sub>j</sub>	$V_R = 0V$ , $f = 1MHz$ I/O to I/O		0.2	0.3	_
ounction Capacitance		$V_R = 0V, f = 1MHz$ I/O to GND		0.4	0.55	pF

# Electrical Parameters (TA = 25°C unless otherwise noted)

	Parameter
PP	MaximumReversePeak Pulse Current
Vc	Clamping Voltage @ IPP
RWM	WorkingPeak Reverse Voltage
R	Maximum Reverse Leakage Current @ VRWM
BR	Breakdown Voltage @ IT
Т	Test Current





## **Typical Characteristic Curves**

Fig.1 Peak Pulse Power Rating Curve

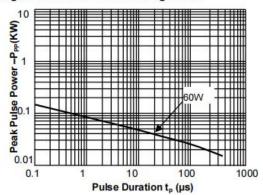


Fig. 2 Pulse Derating Curve

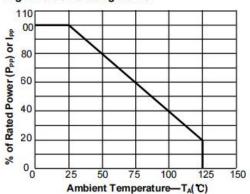


Fig.3 Pulse Waveform-8/20µs

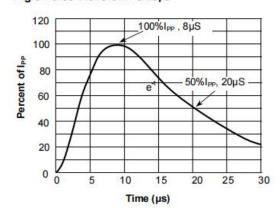
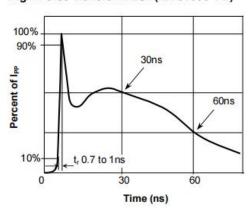
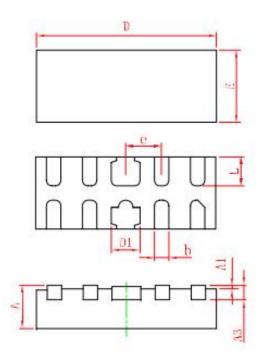


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)





## PACKAGE MECHANICAL DATA



Symbol	Dimensions in millimeters			
- Symbol	Min	Nom	Max	
A	0.45	0.50	0.55	
A1	-	0.02	0.05	
A3	0.10	0.15	0.20	
D	2.45	2.50	2.55	
Е	0.95	1.00	1.05	
D1	0.35	0.40	0.45	
b	0.15	0.20	0.25	
е	0.50BSC			
L	0.35	0.40	0.45	

## **REEL SPECIFICATION**

P/N	PKG	QTY
SEUC10F5V4U-MS	DFN2510-10L	3000



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