

RoHS Compliant Product

A suffix of "-C" specifies halogen and lead-free

DESCRIPTION

Designed to protect voltage sensitive electronic components from ESD and other transients. Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

The combination of small size, low capacitance, and high level of ESD protection makes them a flexible solution for applications such as HDMI, Display Port TM, and MDDI interfaces. It is designed to replace multiplayer varistors (MLV) in consumer equipments applications such as mobile phone, notebook, PAD, STB, LCD TV etc.

FEATURES

- Bi-Directional ESD Protection of One Lines
- Low Capacitance
- Reverse Stand-off Voltage
- Low Reverse Clamping Voltage
- Low Leakage Current
- Fast Response Time
- JESD22-A114-B ESD Rating of Class 3B per Human Body Model
- IEC 61000-4-2 Level 4 ESD Protection

APPLICATIONS

- Computers and Peripherals
- High Speed Data Lines
- Audio and Video Equipment
- Cellular Handsets and Accessories
- Subscriber Identity Module(SIM) Card Protection
- Portable Electronics
- FireWire
- Other Electronics Equipments Communication Systems

MARKING

X

PACKAGE INFORMATION

Package	MPQ	Leader Size
WBFBP-02C-A	10K	7 inch

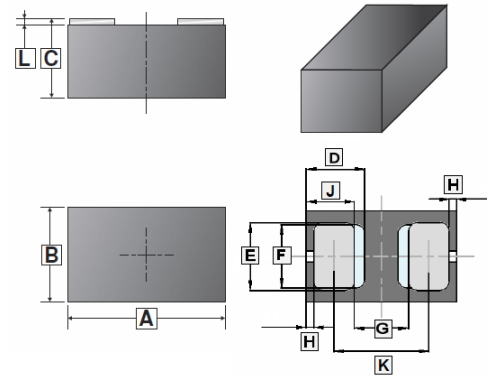
ORDER INFORMATION

Part Number	Type
SESDA03C-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Limit	Unit	
IEC 61000-4-2 ESD Voltage ¹	Air Model	±25	kV	
	Contact Model	±25		
	JESD22-A114-B ESD Voltage ¹	Per Human Body Model		±16
	ESD Voltage ¹	Machine Model		±0.4
Peak Pulse Power ²	P _{PP}	70	W	
Peak Pulse Current ²	I _{PP}	7	A	
Lead Solder Temperature–Maximum (10Sec. Duration)	T _L	260	°C	
Operating & Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C	

WBFBP-02C-A



	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.05	G	0.36	REF.
B	0.55	0.65	H	0.05	REF.
C	0.45	0.55	J	0.27	0.37
D	0.39	REF.	K	0.58	0.68
E	0.4	0.5	L	0.01	0.09
F	0.42	REF.			



Bi-direction

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

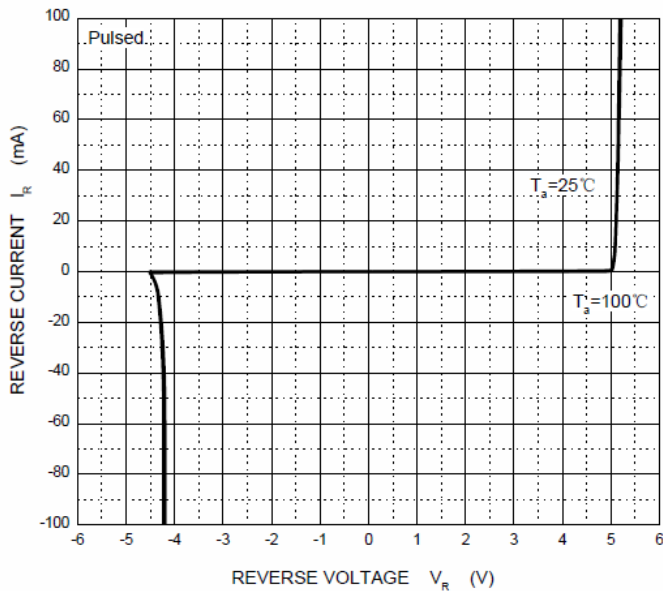
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Stand-off Voltage	V_{RWM}	-	-	3.3	V	
Reverse Leakage Current	I_R	-	-	0.4	μA	$V_{RWM}=3.3\text{V}$
Breakdown Voltage	V_{BR}	4	-	6	V	$I_T=1\text{mA}$
Clamping Voltage ²	V_C	-	-	10	V	$I_{PP}=7\text{A}$
Junction Capacitance	C_J	-	15	20	pF	$V_R=0, f=1\text{MHz}$

Notes:

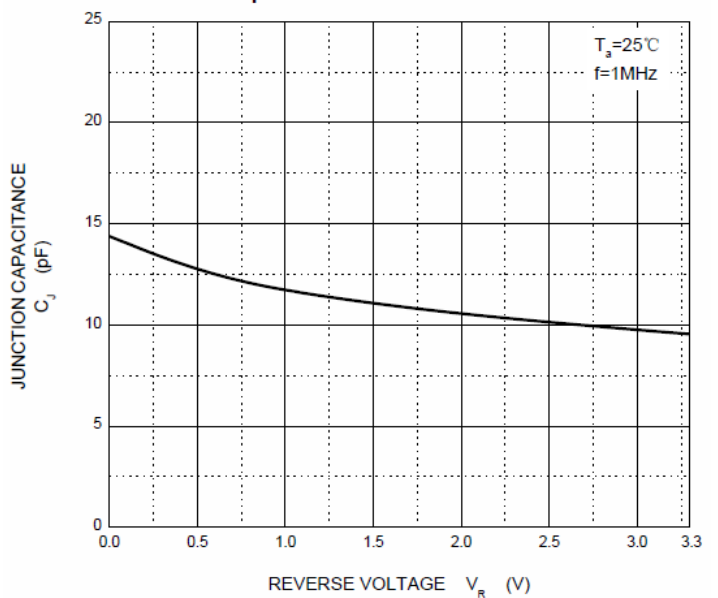
1. Device stressed with ten non-repetitive ESD pulses.
2. Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5.

RATINGS AND CHARACTERISTICS CURVES

Reverse Characteristics



Capacitance Characteristics



V_C — I_{PP}

