

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

This Dual Unidirectional ESD Protector Array family have been designed to protect sensitive equipment against ESD in high speed transmission buses, operating at 5V. This dual array offers an integrated solution to protect up to 2 data lines in a unidirectional mode or, 1 data line in a bi-directional mode, in application where the board space is a premium, in our WBFBP-03D package version.

FEATURES

- IEC61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Low Leakage Current, Maximum of 0.5 μ A at rated voltage
- Maximum Capacitance of 10pF per device at 0Vdc 1MHz
- Peak Power Dissipation of 20W 8/20 μ s Waveform
- Pin to pin compatible with standard WBFBP-03D
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case:WBFBP-03D,Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026

MARKING:

AF

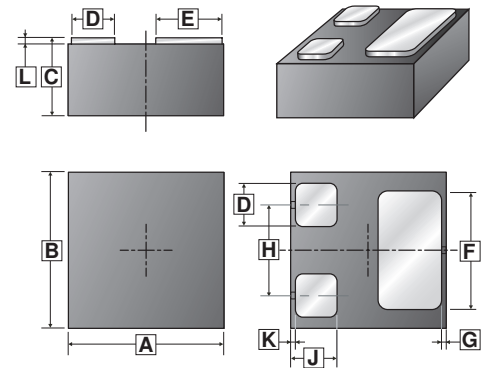
PACKAGE INFORMATION

Package	MPQ	Leader Size
WBFBP-03D	8K	7 inch

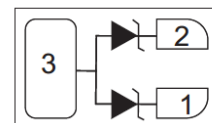
MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Peak Pulse Power (8/20 μ s Waveform)	P _{PP}	20	W
Peak Pulse Current (8/20 μ s Waveform)	I _{PPM}	2	A
ESD Voltage (HBM Per MIL STD883C-Method 3015-6)	V _{ESD}	20	kV
Operating Temperature Range	T _J	-55 ~ 125	°C
Storage temperature Range	T _{STG}	-55 ~ 150	°C

WBFBP-03D



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	-	0.050
B	0.950	1.050	H	0.510	0.610
C	0.010	0.070	J	0.250	0.350
D	0.210	0.310	K	-	0.050
E	0.350 REF.		L	0.450	0.550
F	0.680 REF.				



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

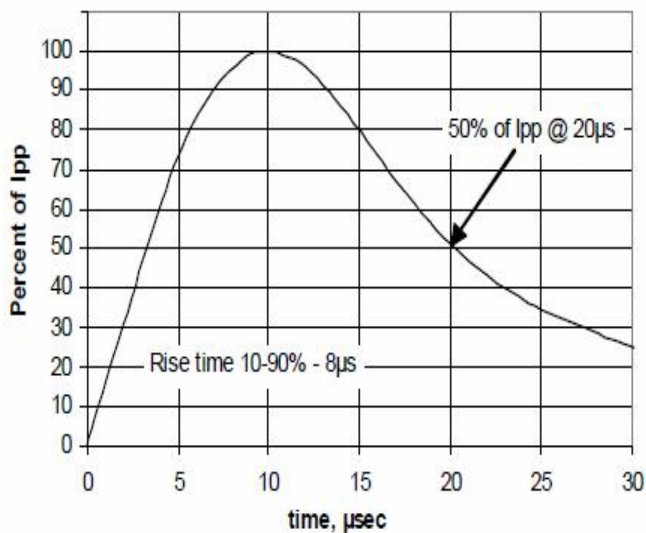
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Working Peak Reverse Voltage	V_{RWM}	-	-	5.0	V	
Reverse Breakdown Voltage	V_{BR}	6.2	-	7.2	V	$I_{BR}=1\text{mA}$
Reverse Leakage Current	I_R	-	-	0.5	μA	$V_R=5\text{V}$
Clamping Voltage (8/20 μs)	V_C	-	-	10	V	$I_{PP}=2\text{A}$
Typical Junction Capacitance ¹	C_J	-	9	10	pF	0Vdc Bias f=1Mhz between pin 1,2 to 3 (Gnd)

Note:

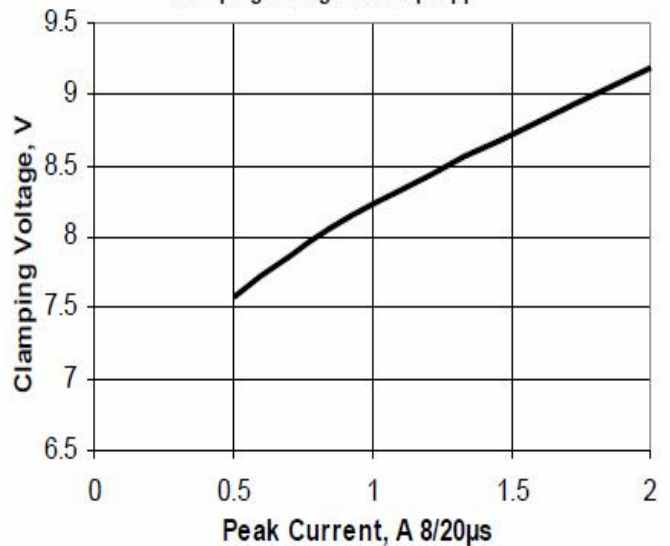
1. Capacitance between pins 1 and 2 is half of the value, in a bi-directional configuration.

CHARACTERISTIC CURVES

Pulse Waveform



Clamping Voltage vs 8/20 μs Ipp



Off-State Capacitance vs DC Bias

