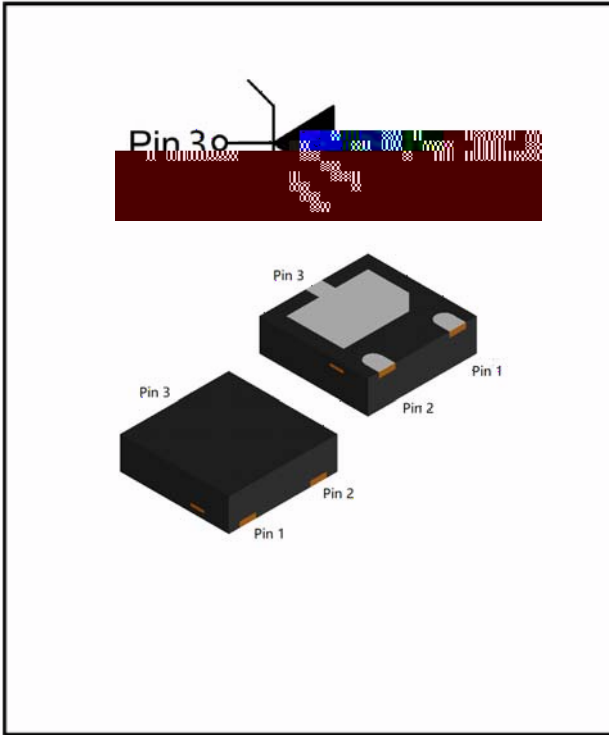


1-Line, Uni-directional, Transient Voltage Suppressor



Features

- Stand-off voltage: 24V Max
- Transient protection for each line according to
 - IEC61000-4-2(ESD): $\pm 30\text{kV}$ (contact)
 - IEC61000-4-5(surge): 140A (8/20 μs)
- Low leakage current
- Low clamping voltage
- Low clamping voltage:
- RoHS Compliant

Applications

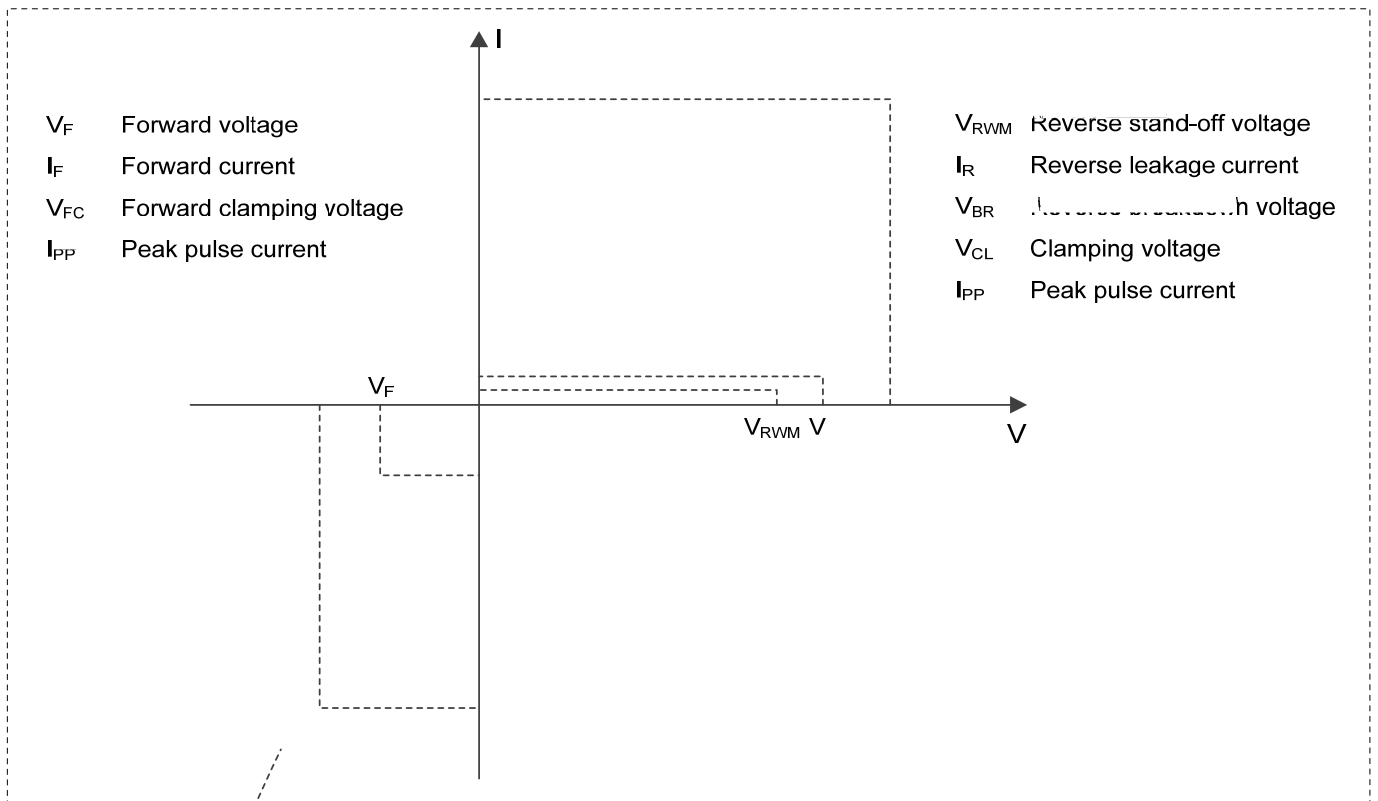
- Power Management
- Industrial Application
- Power Supply Protection

Mechanical Data

- Package: DFN2020-3L
- Case Material: "Green" Molding Compound
- Marking Information: See Below



Definitions of electrical characteristics





ESD24VP4A2

Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	7000	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{pp}	140	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	kV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	-55~125	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				24
Reverse leakage current	I_R	μA	$V_{RWM} = 24V$			1
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	24.8		30
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 50A, t_p = 8/20\mu s$			32
		V	$I_{PP} = 140A, t_p = 8/20\mu s$			50
Junction capacitance	C_J	pF	$V_R = 0V, f = 1MHz$		410	

Notes:

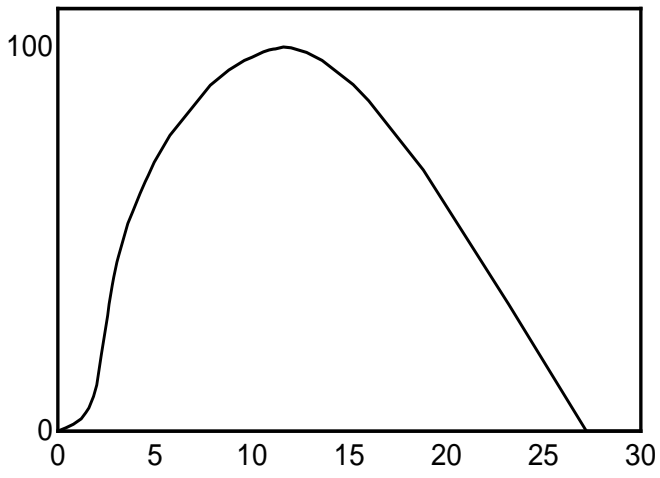
(1). Non-repetitive current pulse, according to IEC61000-4-5.

Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD24VP4A2	F1	Approximate 010	3000	30000	120000	7" reel



Characteristics (Typical)





Outline Dimensions

Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	0.55	0.60	0.80
A1	0.00	0.02	0.05
A3	0.10 REF.		
b	0.25	0.30	0.35
D	1.90	2.00	2.10
E	1.90	2.00	2.10
D2	0.95	1.05	1.15
E2	1.40	1.50	1.60
e	1.20	1.30	1.40

Recommended PCB Layout

Unit:mm



ESD24VP4A2

Disclaimer

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