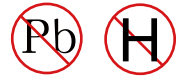




SMD ESD Protection Diode

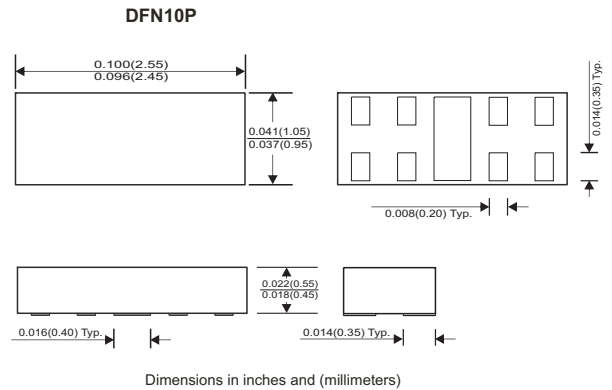


FEATURES

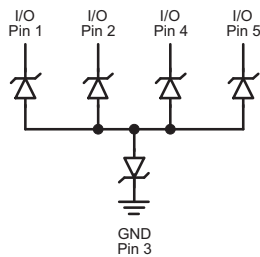
- ◆ IEC61000-4-2 (ESD)±14kV(Contact),±15kV(Air).
- ◆ Working voltage: 5.0 V
- ◆ Low leakage current.
- ◆ Low capacitance: 0.15 pF typical (I/O to GND)

MECHANICAL CHARACTERISTICS

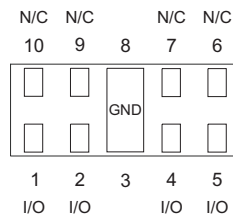
- ◆ Case: DFN10P package,molded plastic.
- ◆ Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- ◆ Mounting position: Any



Circuit diagram



Package



Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power (tp = 8/20 us)	PPp	60	W
Peak pulse current (tp = 8/20 us)	IPP	3	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	ESD	±15 ±14	kV
Operating temperature	TJ	-55 to +125	°C
Storage temperature	TSTG	-55 to +150	°C

Electrical Characteristics (at TA=25 °C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		VRWM			5.0	V
Breakdown voltage	IR = 1mA	VBR	6.0			V
Leakage current	VR = 5.0V	IL			50	nA
Clamping voltage	IPP = ±1A, Tp = 8/20us Any Channel Pin to Ground	Vc		12		V
Junction capacitance	VR = 0 V, f = 1MHz Any Channel Pin to Ground	Cj		0.15	0.25	pF

DEVICE CHARACTERISTICS

YSESDAR5V0SP-10P

RATING AND CHARACTERISTIC CURVES

Fig.1 - 8/20us Peak Pulse Current
Waveform ACC. IEC 61000-4-5

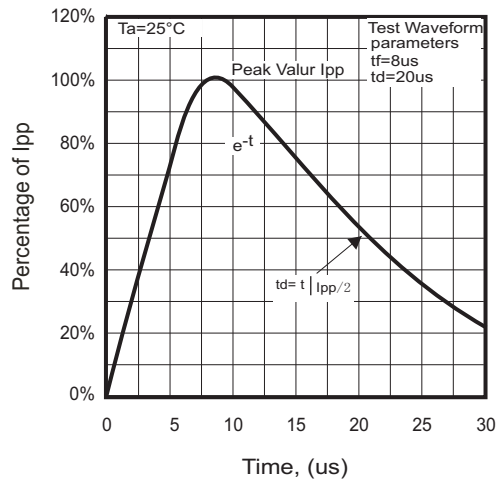


Fig.2 - Typical Capacitance Between
Terminals Characteristics

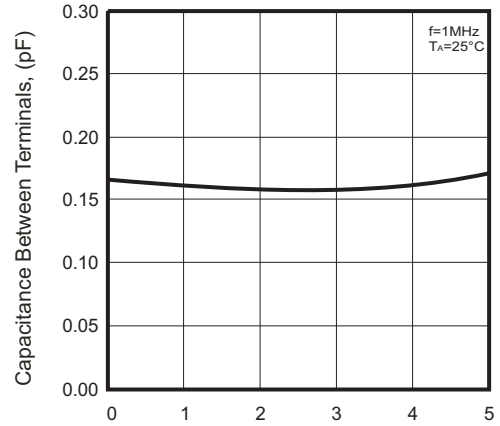


Fig.3 - Typical Clamping Voltage Vs.
Peak Pulse Current

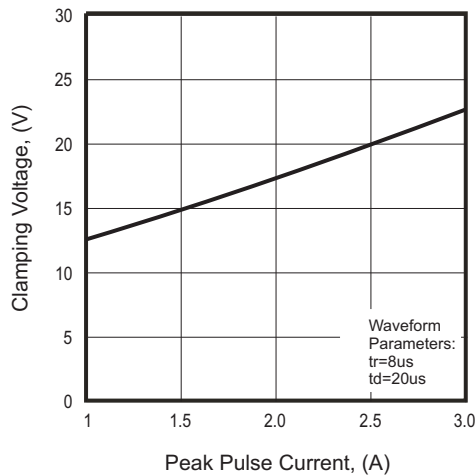
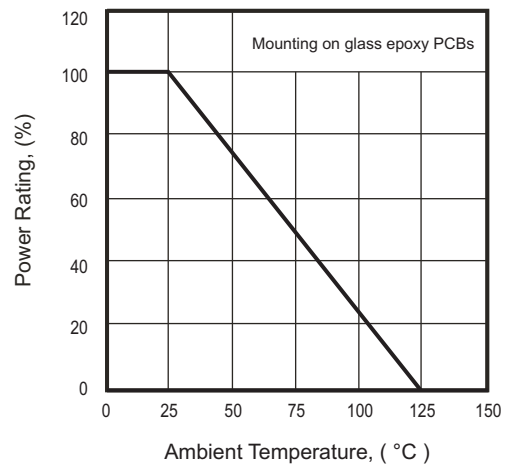


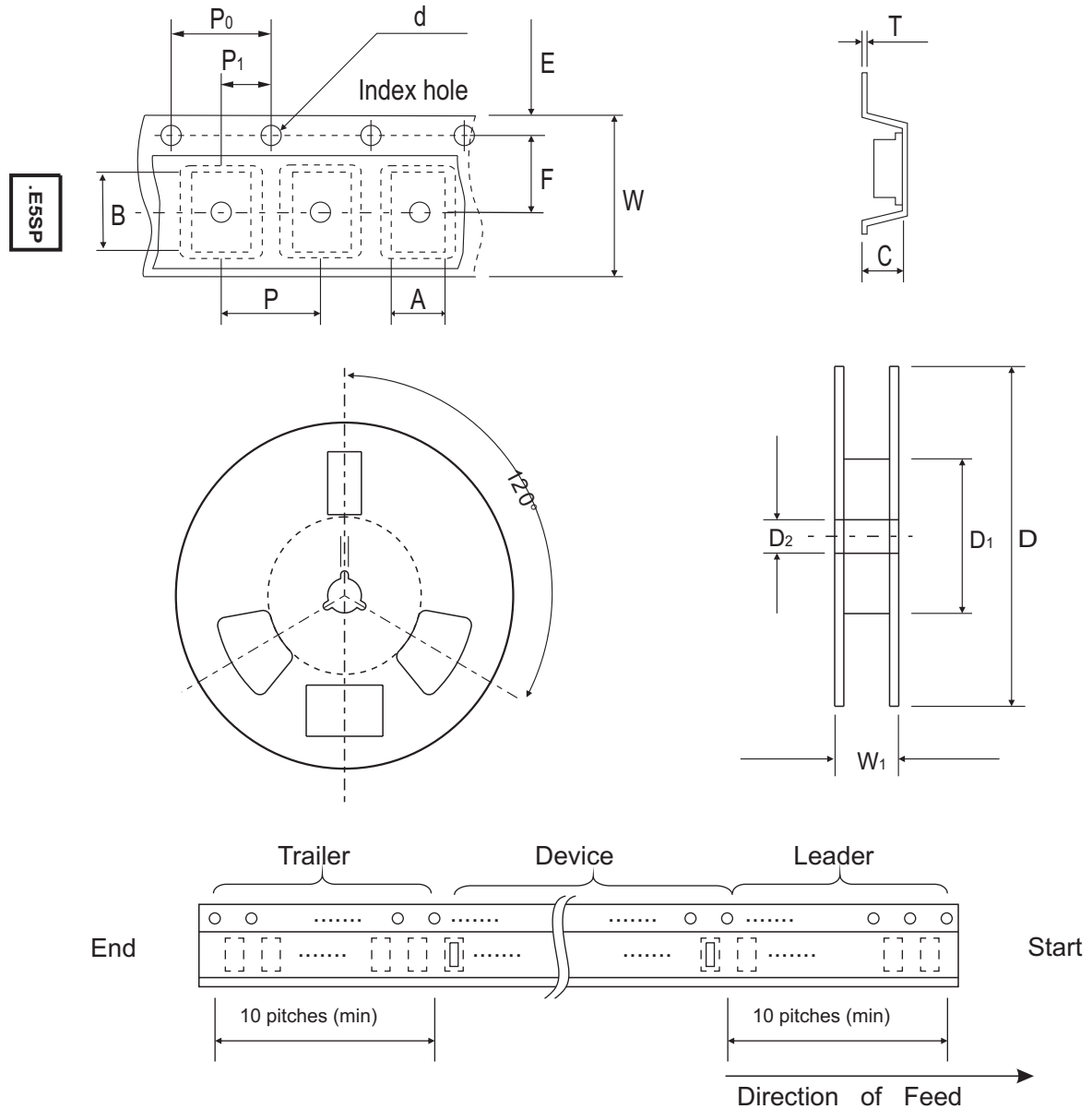
Fig.4 - Power Rating Derating Curve



PACKAGE OUTLINE & DIMENSIONS

YSESDAR5V0SP-10P

Reel Taping Specification



DFN10P	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.14 ± 0.05	2.64 ± 0.05	0.64 ± 0.05	1.50 + 0.10 - 0	178 ± 1	60.0 + 0.50 - 0	13.0 ± 0.20
	(inch)	0.045 ± 0.002	0.104 ± 0.002	0.025 ± 0.002	0.059 + 0.004 - 0	7.008 ± 0.039	2.362 + 0.020 - 0	0.512 ± 0.008

DFN10P	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.05	8.00 ± 0.30	12.0 ± 0.15
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.002	0.315 ± 0.012	0.472 ± 0.006

PACKAGE OUTLINE & DIMENSIONS

YSESDAR5V0SP-10P

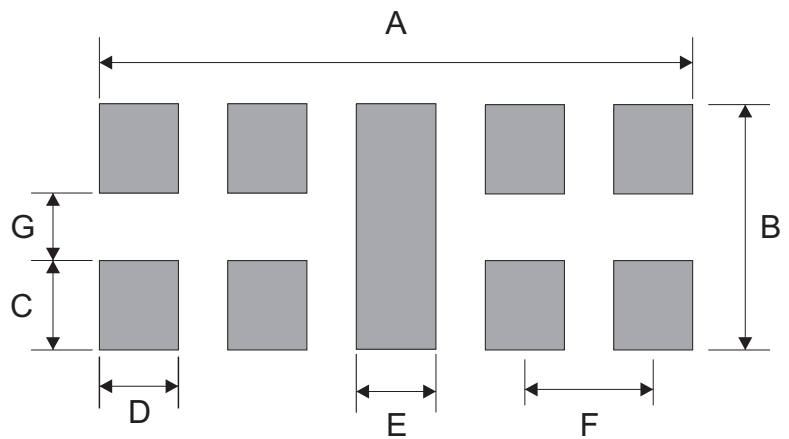
Marking Code

Part Number	Marking Code
YSESDAR5V0SP-10P	.E5SP



Suggested PAD Layout

SIZE	DFN10P	
	(mm)	(inch)
A	2.30	0.091
B	1.00	0.039
C	0.38	0.015
D	0.30	0.012
E	0.30	0.012
F	0.50	0.020
G	0.24	0.009



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
DFN10P	3,000	7