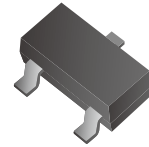


ACPDT-36VEU-HF

RoHS Device
Halogen Free



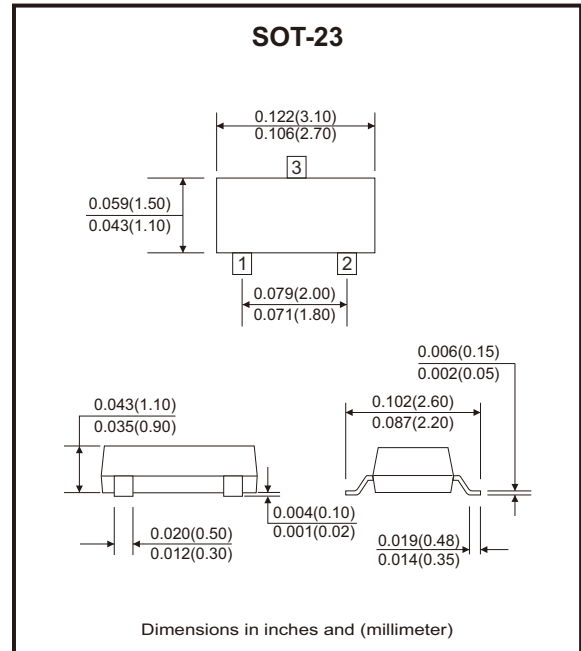
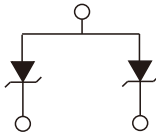
Features

- Unidirectional ESD protection diode.
- High ESD protection level.
- Working voltage: 36V.
- Low clamping voltage.
- Low leakage current.
- AEC-Q101 Qualified.

Mechanical data

- Case: SOT-23 Standard package, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Mounting position: Any.

Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu s$	P_{PP}	100	W
Peak pulse current	$T_P = 8/20\mu s$	I_{PP}	1.5	A
Operating temperature		T_j	-40~+125	°C
Storage temperature range		T_{STG}	-55~+150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V_{RWM}			36	V
Breakdown voltage	$I_R = 1mA$	V_{BR}	40			V
Reverse leakage current	$V_R = 36V$	I_R			0.1	μA
Forward voltage	$I_F = 10mA$	V_F			1.2	V
Clamping voltage	$I_{PP} = 1A, T_P = 8/20\mu s$	V_C			58	V
Junction capacitance	$V_R = 0V, f = 1MHz$	C_J		20		pF

Typical Rating and Characteristic Curves (ACPDT-36VEU-HF)

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

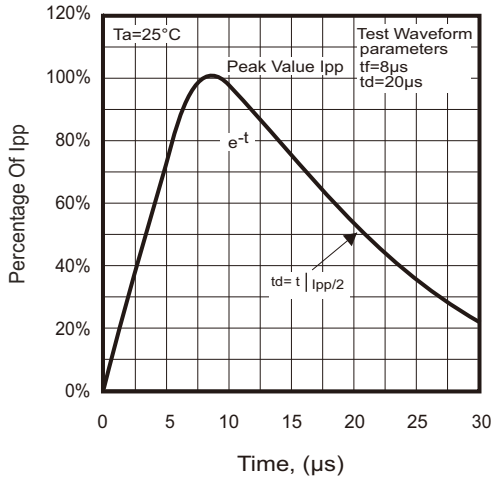


Fig.2 - Power Rating Derating Curve

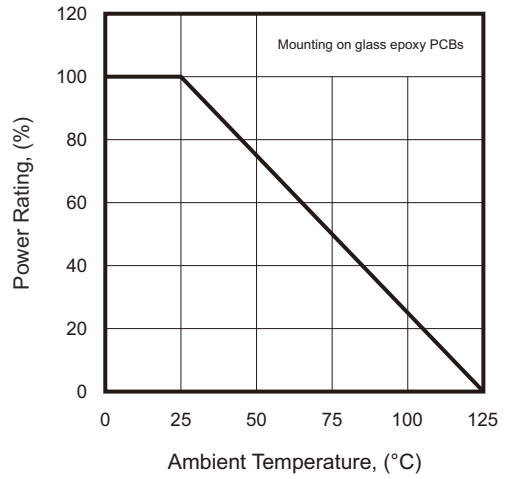


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

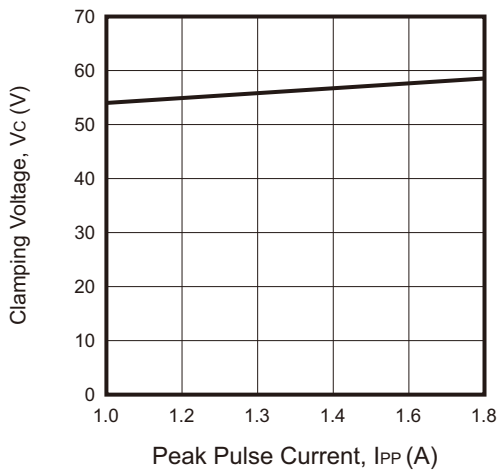
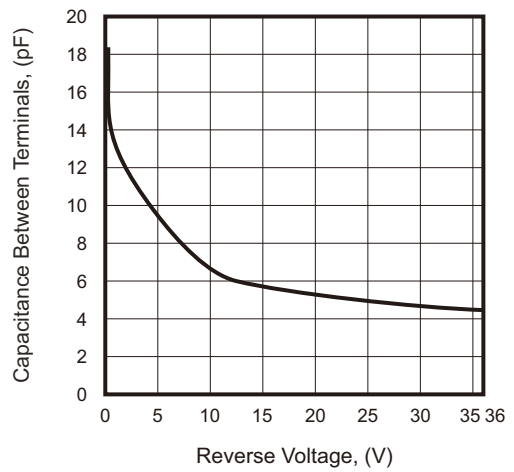
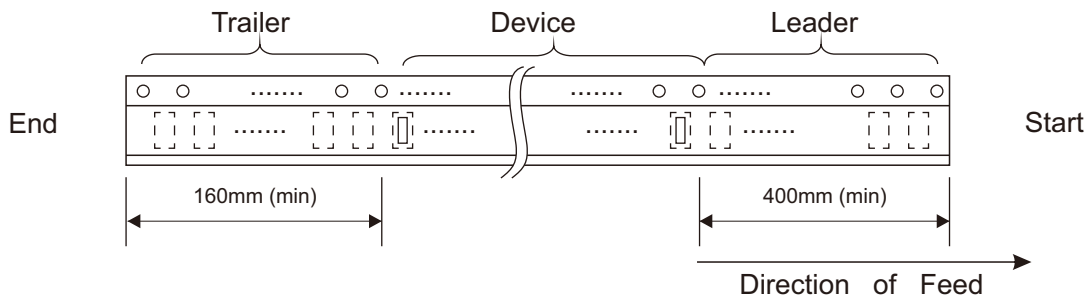
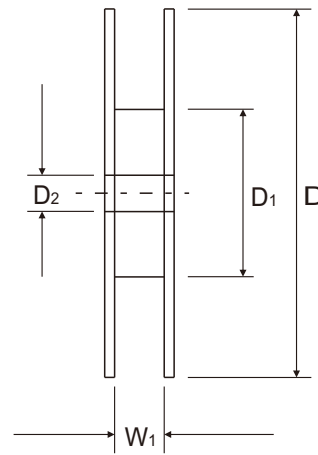
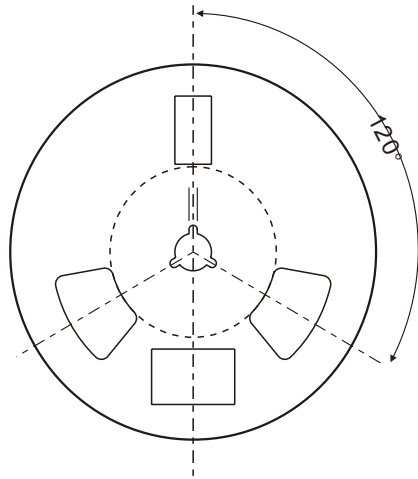
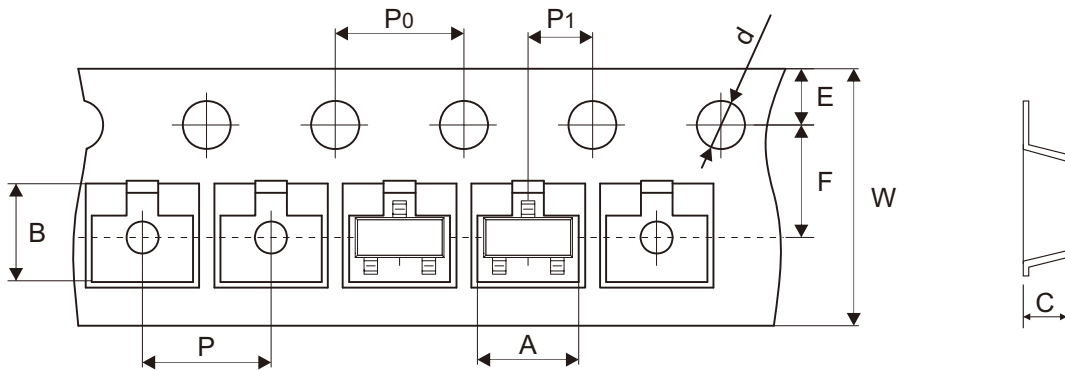


Fig.4 - Capacitance Between Terminals Characteristics



Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.374 ± 0.039