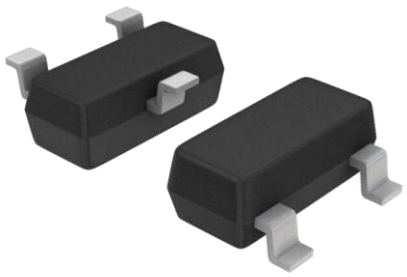
Features

- 360 Watts peak pluse power(tp=8/20μs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC61000-4-2 ±30kV (contact) ±30kV (air)
- IEC61000-4-4(EFT) 40A (5/50ns)
- IEC61000-4-5(Lightning)6A(8/20μs)



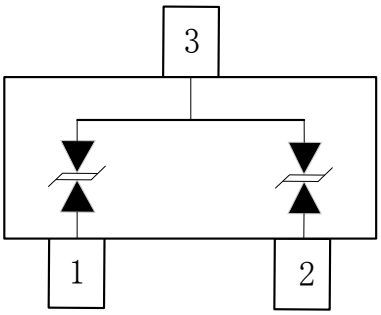
Applications

- Portable Electronics
- Set-Top Box
- Cellular Handsets and Accessories
- Contral & Monitoring Systems
- RS-232,RS-422&RS-485

Mechanical Data

- SOT23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration



SOT-23(Top View)

Absolute Maximum Rating

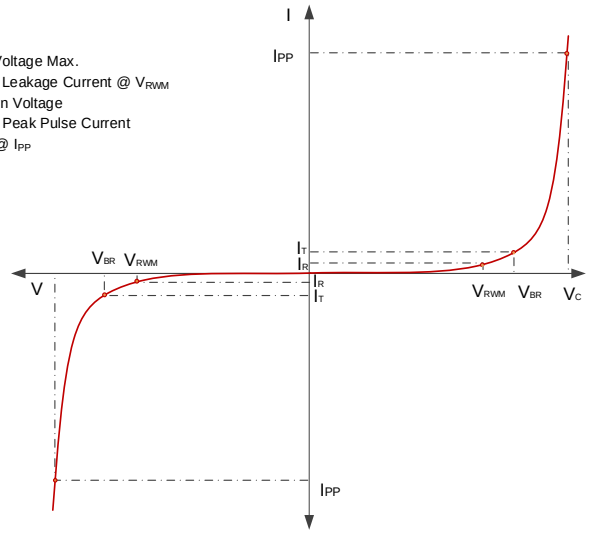
Rating	Symbol	Value	Units
Reverse Voltage	P_{PP}	360	Watts
Peak Pluse Current(tp=8/20μs)	I_{PP}	6	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	30 30	KV
Lead Soldering Temperature	T_L	260(10seconds)	℃
OperatingTemperature	T_J	-55 to + 125	℃
Storage Temperature	T_{STG}	-55 to + 125	℃

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

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	40			V
Reverse Leakage Current	I_R	V_{RWM}=36V, T=25℃		0.1	0.5	μA
Clamping Voltage	V_C	I_{PP}=6A,tp=8/20μs		54	60	V
Junction Capacitance	C_j	V_R=0V, f=1MHz PIN1/PIN2 to PIN3		12	16	pF

Electrical Parameters (TA = 25°C unless otherwise noted)

V_{RWM} ·····Reverse Working Voltage Max.
I_R ····· Maximum Reverse Leakage Current @ V_{RWM}
V_{BR} ····· Reverse Breakdown Voltage
I_{PP} ····· Maximum Reverse Peak Pulse Current
V_C ····· Clamping Voltage @ I_{PP}



Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

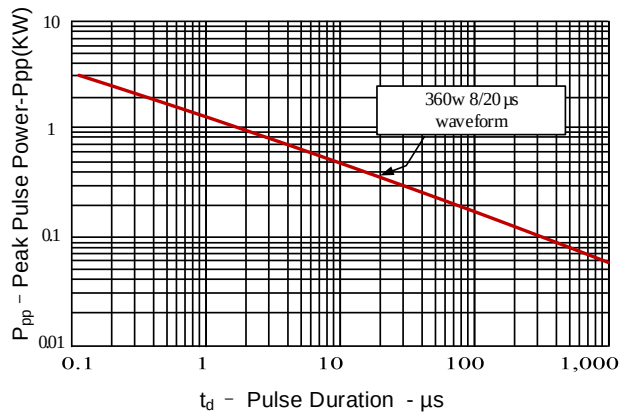


Figure 2: Power Derating Curve

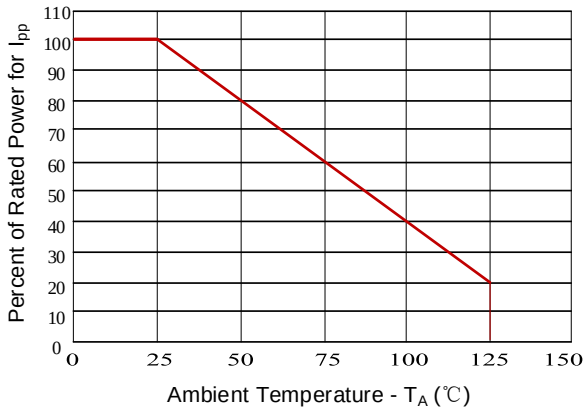


Figure3: Pulse Waveform

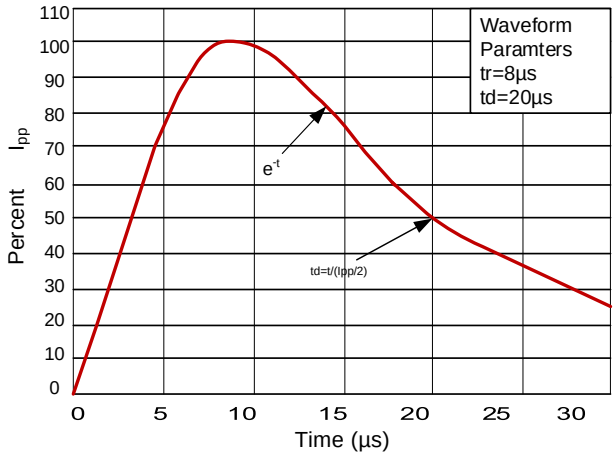
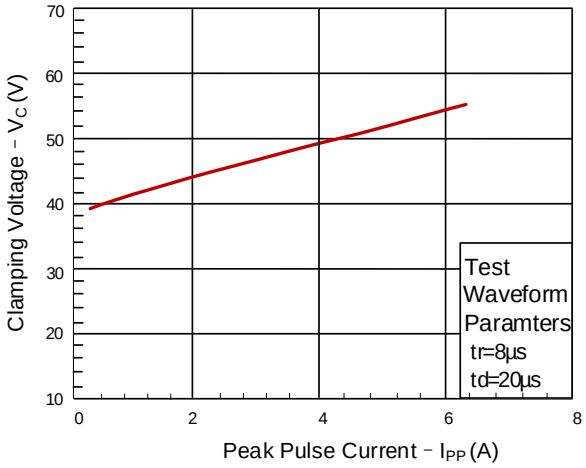
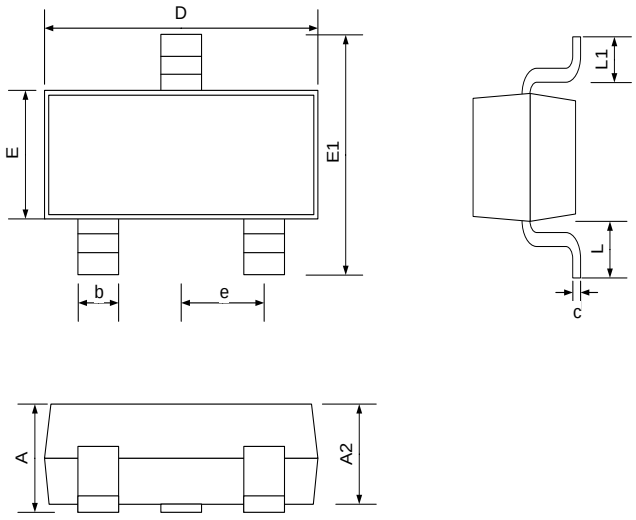


Figure 4: Clamping Voltage vs.Ipp

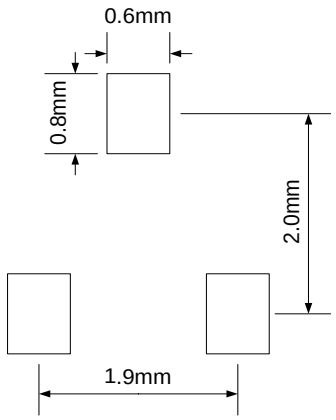


Outline Drawing-SOT23



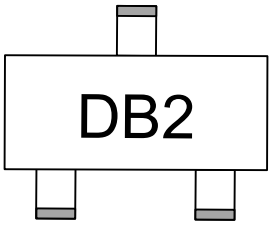
COMMON DIMENSION (mm)			
PKG	SOT23		
REF.	MIN.	NOM.	MAX.
A	0.900		1.150
A2	0.900		1.050
b	0.300		0.500
c	0.080		0.150
D	2.800		3.000
E	1.200		1.400
E1	2.250		2.550
e		0.950	
L		0.550	
L1	0.300		0.500

Recommend PCB Layout



Notes: This PCB layout is for reference purposes only.

Marking



Ordering Information

Part number	Type	Reel size	MOQ
SM36T1G	T/R	7 inch	3k/reel

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

DOWO:

5.0SMDJ160CA 5.0SMDJ40A NUP2105L SI2301 SMDJ36CA 1N5819 2W10 5.0SMDJ22CA ESD36VD5B P6SMB39CA SMBJ6.8A SS210A SS310B P6KE62A RB521S30T1G 1.5KE75CA LMBR240ET1G P6KE47CA SR05-4A 5.5A SS110A UDD32C05L01 BAV70 P6KE47A PESD24VL1BA SM712 1.5KE62CA 30KP198CA 5KP24CA ES3DB RCLAMP0521P-N