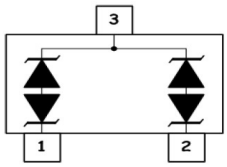
DESCRIPTION

The SMxxC Series is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.



Features

- 350 Watts Peak Pulse Power per (8/20μs)
- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Protects two bidirectional line
- Low clamping voltage
- Low leakage current
- Working voltages : 3V, 5V, 8V, 12V, 15V, 18V 20V , 24V , 36V

Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	± 15 ± 8	KV
Peak Pulse Power(tp=8/20us waveform)	P_{PP}	350	W
Operating Temperature	T_{OPT}	−55 to +150	°C
Storage Temperature	T_{STG}	−55 to +150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	T_L	260(10 sec.)	°C

The above data are for reference only.

Electrical Characteristics (T_A=25°C unless otherwise specified)

PART NUMBER	V_{RWM} (V) (max.)	V_B (V) (min.)	I_T (mA)	V_C@1A (V) (max.)	V_C (V) (max.)	(@A)	I_R (μA) (max.)	C_T (pF) (max.)
SM03C	3.3	4	1	7.5	16	20	40	450
SM05C	5	6	1	9.8	18	17	10	200
SM08C	8	8.5	1	13.4	24	15	2	120
SM12C	12	13.3	1	19	32	11	1	75
SM15C	15	16.7	1	24	38	10	1	68
SM18C	18	20.0	1	29	45	9	1	57
SM20C	20	22.3	1	35	50	8	1	52
SM24C	24	26.7	1	43	52	7	1	50
SM36C	36	40	1	60	75	4.5	1	35

ELECTRICAL CHARACTERISTICS CURVE

Fig 1 8/20μs Waveform per IEC61000-4-5

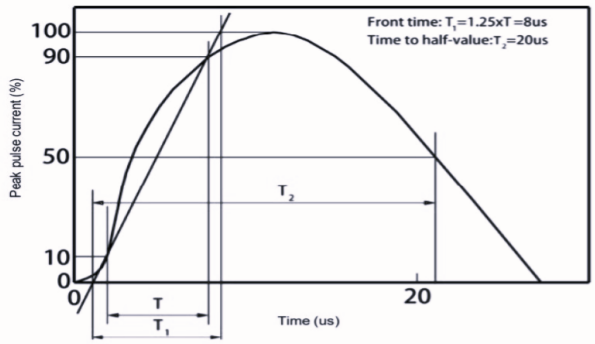


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

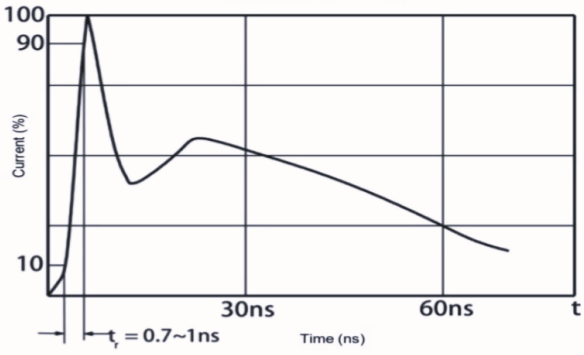


Fig 3 Voltage vs Capacitance

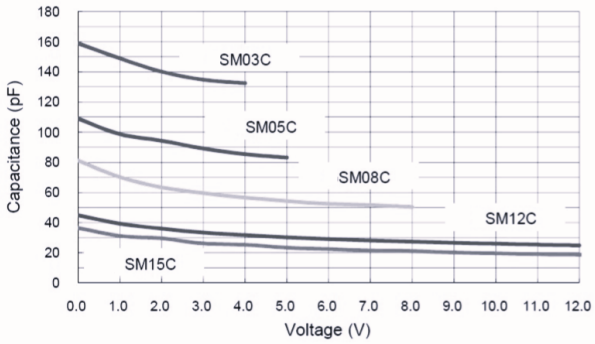


Fig 4 Voltage vs Capacitance

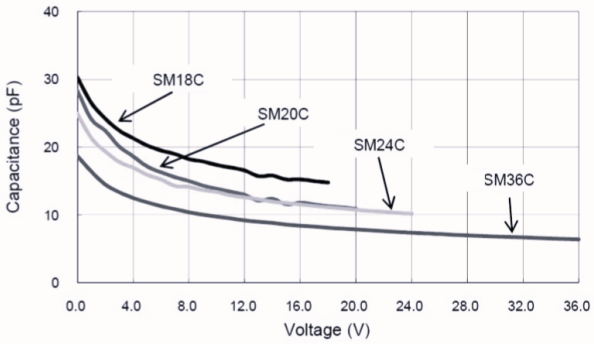


Fig 5 Clamping Voltage vs Peak Pulse Current

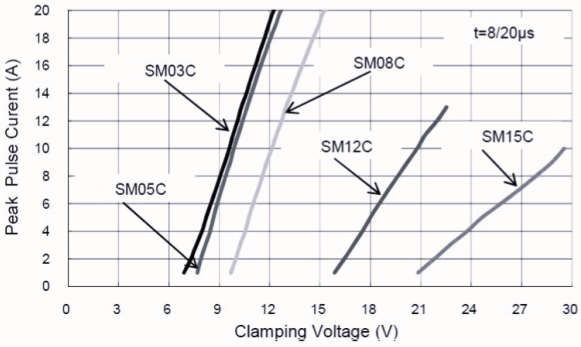
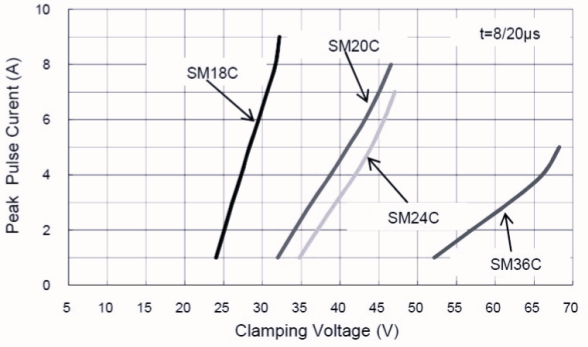
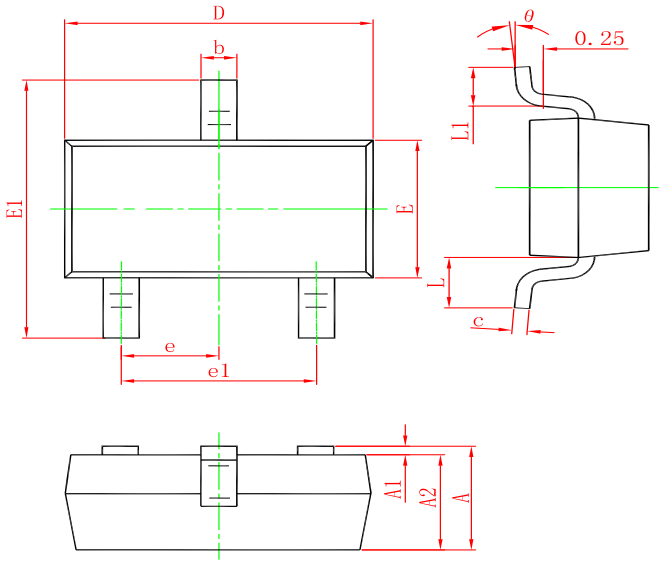


Fig 6 Clamping Voltage vs Peak Pulse Current



The curve above is for reference only.

SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Ordering information

Order code	Package	Baseqty	Deliverymode	Marking
UMW SM03C	SOT-23	3000	Tape and reel	03C
UMW SM05C	SOT-23	3000	Tape and reel	05C
UMW SM08C	SOT-23	3000	Tape and reel	08C
UMW SM12C	SOT-23	3000	Tape and reel	12C
UMW SM15C	SOT-23	3000	Tape and reel	15C
UMW SM18C	SOT-23	3000	Tape and reel	18C
UMW SM20C	SOT-23	3000	Tape and reel	20C
UMW SM24C	SOT-23	3000	Tape and reel	24C
UMW SM36C	SOT-23	3000	Tape and reel	36C

单击下面可查看定价，库存，交付和生命周期等信息

>>UMW(友台半导体)