SMF05CT1G
5-Line TVS Array

Features

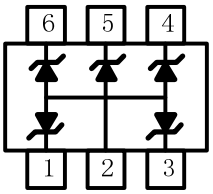
Working voltage: 5V
Low clamping voltage
Protects five I/O lines
Complies with following standards:
– IEC 61000-4-2 (ESD) immunity test
Air discharge: ±15kV
Contact discharge: ±8kV
– IEC61000-4-4 (EFT) 40A (5/50ns)
RoHS Compliant

Mechanical Characteristics

Package: SOT-363 (2.0X2.1X0.35mm)
Lead Finish: Matte Tin
Case Material: “Green” Molding Compound.
UL Flammability Classification Rating 94V-0
Moisture Sensitivity: Level 3 per J-STD-020

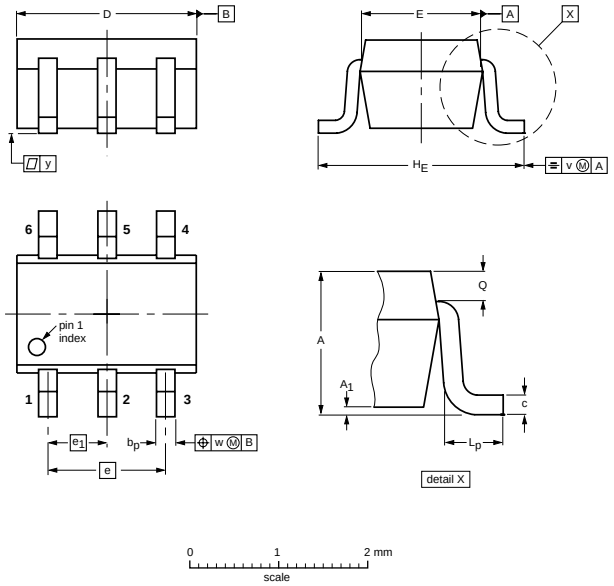
Applications

Portable Instrumentation
Microprocessor Based Equipmenmt
Cell Phone Handsets and Accessories
Personal Digital Assistants (PDAs) and Pagers



Pin Configuration

SOT-363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1 max	b_p	c	D	E	e	e_1	H_E	L_p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Ordering information

Order code	Package	Making
SMF05CT1G	SOT-363	6J

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	100	W
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	VESD	±15 ±8	kV
Operating Temperature Range	TJ	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

SMF05CT1G

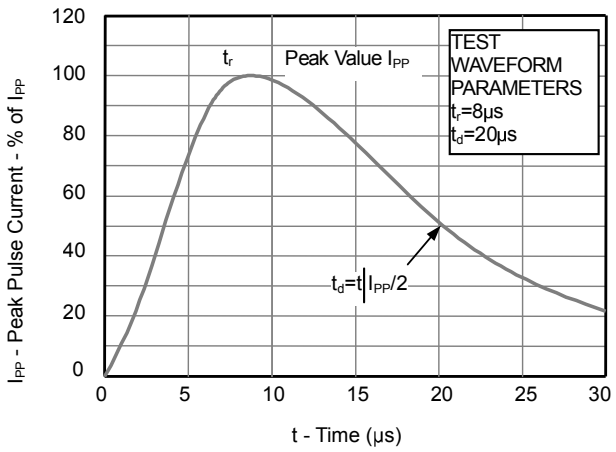
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			5	V	
Breakdown Voltage	V_{BR}	6			V	I_T = 1mA
Reverse Leakage Current	I_R			0.1	uA	V_{RWM} = 5V
Forward Voltage	V_F			1.2	V	I_F = 15mA
Clamping Voltage	V_C			10	V	I_{PP} 1A=(8 x 20us pulse)
Junction Capacitance	C_J		30		pF	VR = 0V, f = 1MHz

Note 1: I/O pins are Pin 1, 3, 4, 5 and 6

RATING AND CHARACTERISTIC CURVES (SMF05CT1G)

Fig1. 8/20μs Pulse Waveform



g2. ESD Pulse Waveform (according to IEC 61000-4-2)

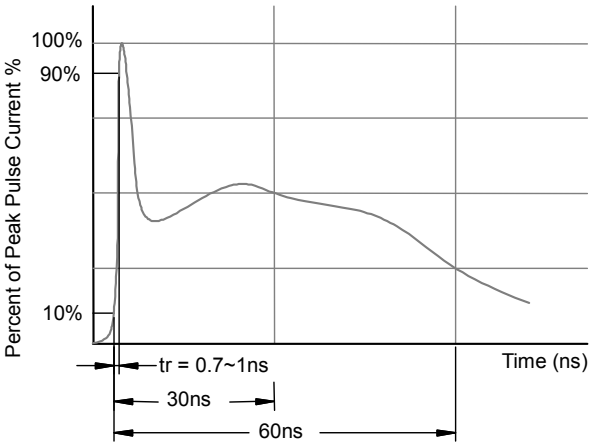


Fig3. Power Derating Curve