



■ Features

- Uni-directional ESD protection of five lines
- 100Watts peak pulse power ($t_p = 8/20\mu s$)
- Working voltage: 5V
- Capacitance: 100pF Typ
- Low clamping voltage
- Low leakage current
- Protecting 5 unidirectional lines
- IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
- IEC 61000-4-5 (Lightning) 12A (8/20 μs)

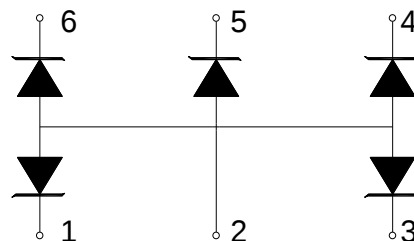
■ Mechanical Data

- Package: SOT-363
- Molding compound flammability rating: UL 94V-0
- RoHS/WEEE Compliant

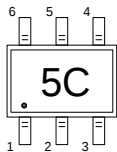
■ Applications

- Cellular Handsets and Accessories
- Cordless Phones
- Personal Digital Assistants (PDA's)
- Notebooks & Handhelds
- Digital Cameras
- Portable Instrumentation

■ Schematic & PIN Configuration



■ Ordering Information

Part Number	Package	Marking	Packing	Reel Size
SMF05CT1G	SOT-363		3000 Tape & Reel	7 inches

■ Absolute Maximum Rating($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Parameters	Symbol	Min	Max	Unit
Peak pulse power ($t_p=8/20\mu\text{s}$)@ 25°C	P_{pk}	-	100	W
Peak pulse current ($t_p=8/20\mu\text{s}$)@ 25°C	I_{PP}		12	A
ESD (IEC61000-4-2 air discharge) @ 25°C	V_{ESD}	-	± 30	kV
ESD (IEC61000-4-2 contact discharge) @ 25°C	V_{ESD}	-	± 30	kV
Junction temperature	T_J	-	150	$^{\circ}\text{C}$
Operating temperature	T_{OP}	-40	125	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55	150	$^{\circ}\text{C}$
Lead temperature	T_L	-	260	$^{\circ}\text{C}$

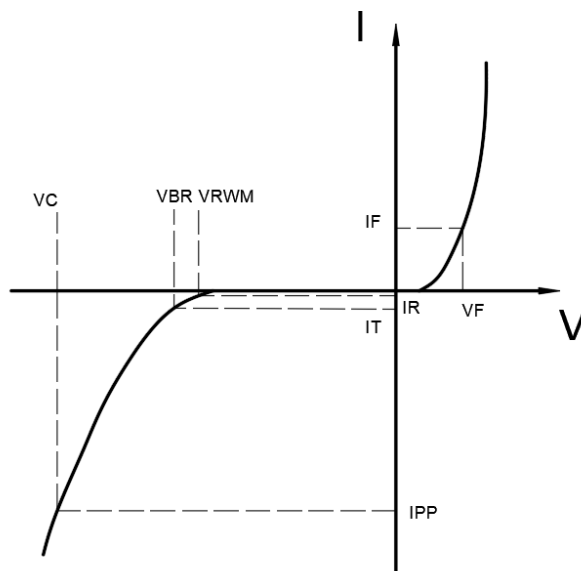
■ Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$			1	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}$; $t_p=8/20\mu\text{s}$		7.5		V
Clamping Voltage	V_C	$I_{PP}=12\text{A}$; $t_p=8/20\mu\text{s}$		11		V
Junction Capacitance	C_J	I/O to GND; $V_R=0\text{V}$; $f=1\text{MHz}$		100		pF

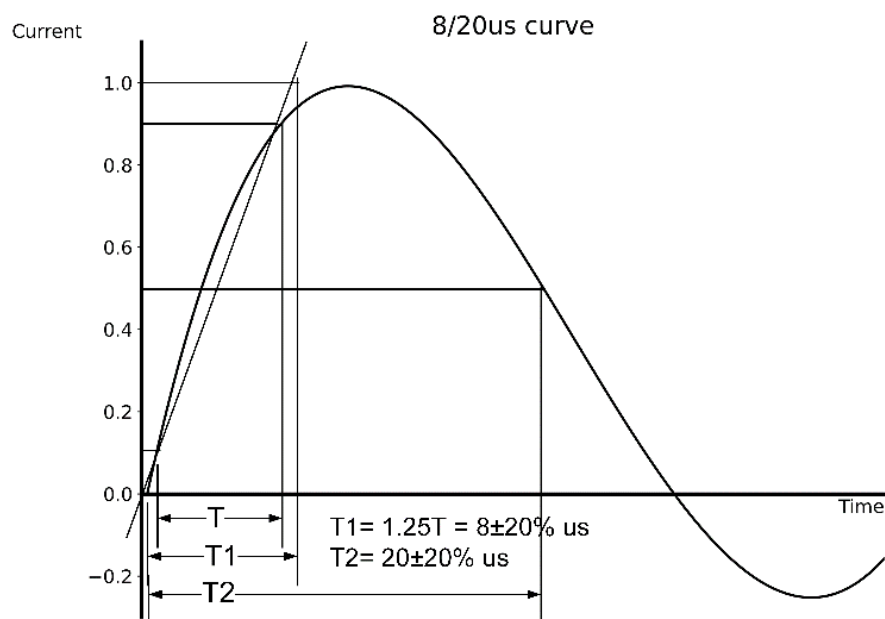


■ Electrical Parameters($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
I_F	Forward Current
V_F	Forward Voltage @ I_F

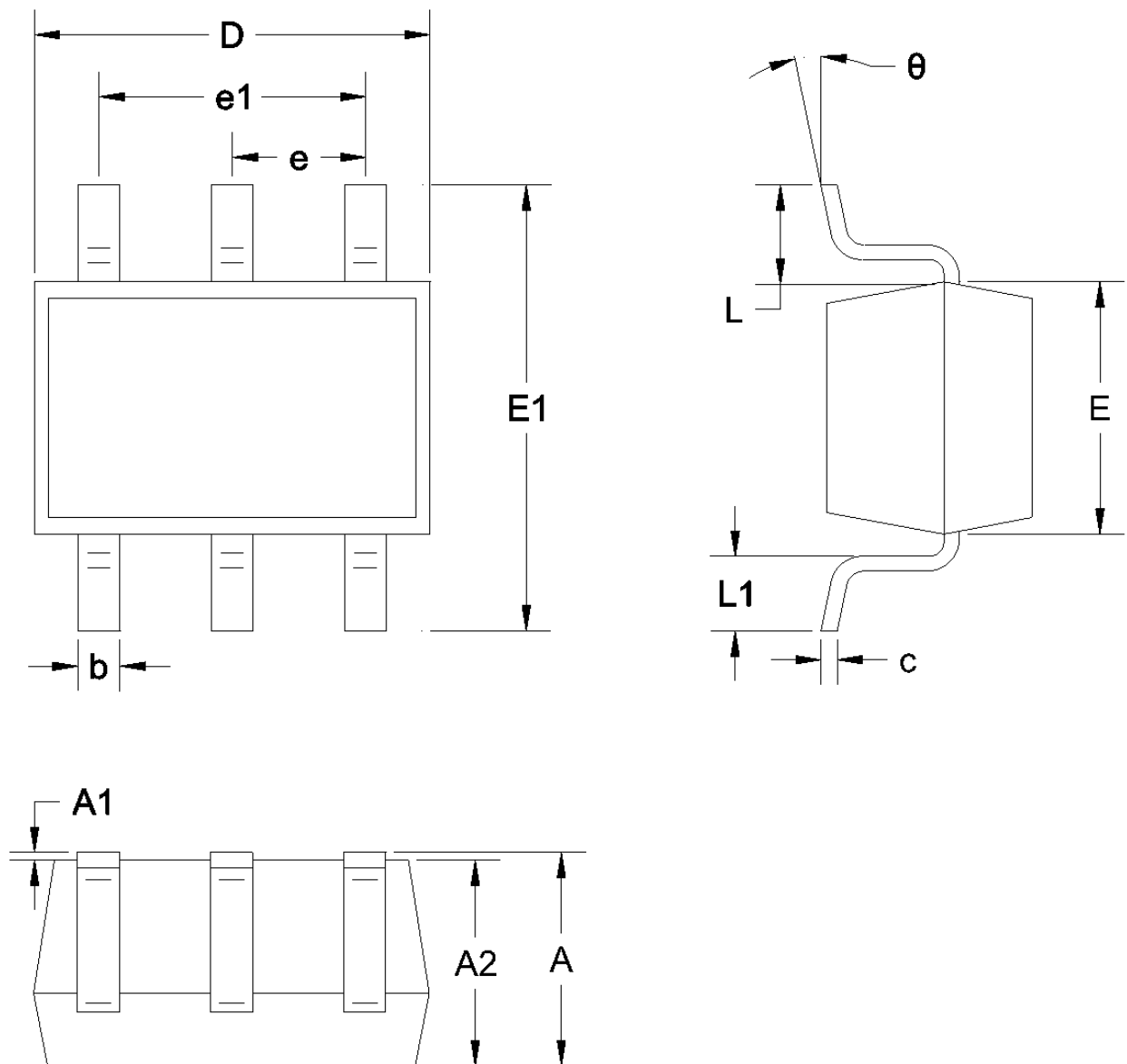


■ Typical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)





■ Outline Drawing – SOT-363



Unit: mm

Symbol		A	A1	A2	b	c	D	θ
Spec	Min	0.900	0.000	0.900	0.150	0.080	2.000	0°
	Max	1.100	0.100	1.000	0.350	0.150	2.200	8°
Symbol		E	E1	e	e1	L	L1	-
Spec	Min	1.150	2.150	0.650	1.200	0.525	0.2600	-
	Max	1.350	2.450	REF	1.400	REF	0.4600	-