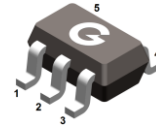
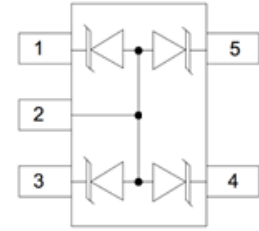


Features

- Low leakage current
- Working voltage: $V_{RWM} = 5V$
- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 15 kV (air), ± 8 kV (contact)

HF



SOT-353

Mechanical Data

- Case: SOT-353
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
SMF05	SOT-353	3000 pcs / Tape & Reel	F05

Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	V_{ESD-A}	± 15	kV
IEC 61000-4-2; ESD (Contact)	V_{ESD-C}	± 8	kV
Reverse Stand-off Voltage	V_{RWM}	5	V
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	100	W
Peak Pulse Current ($t_p = 8/20\mu\text{s}$)	I_{PP}	7	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Operating Temperature	T_J	$-55 \sim +125$	$^\circ\text{C}$
Storage Temperature	T_{STG}	$-55 \sim +150$	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6	-	8	V
Reverse Leakage Current	I_R	$V_R = 5\text{V}$	-	-	5	μA
Clamping Voltage	V_C	$I_{PP} = 7\text{A}$, ($t_p = 8/20\mu\text{s}$)	-	-	15	V
Diode Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$ Pin 1 ,3,4,5 to 2	-	-	130	pF

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

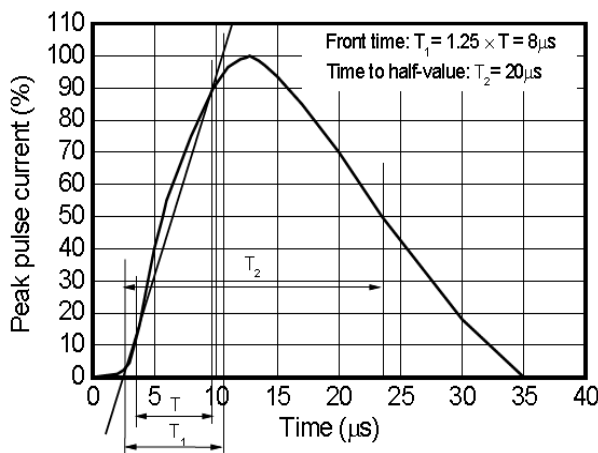


Fig 1 8/20 μs waveform per IEC61000-4-5

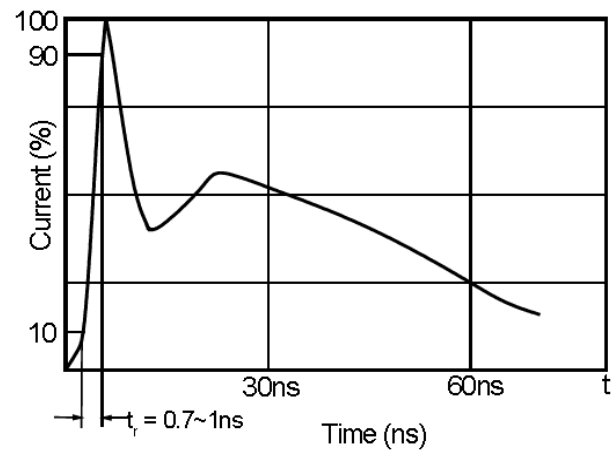


Fig 2 ESD pulse waveform according to IEC61000-4-2

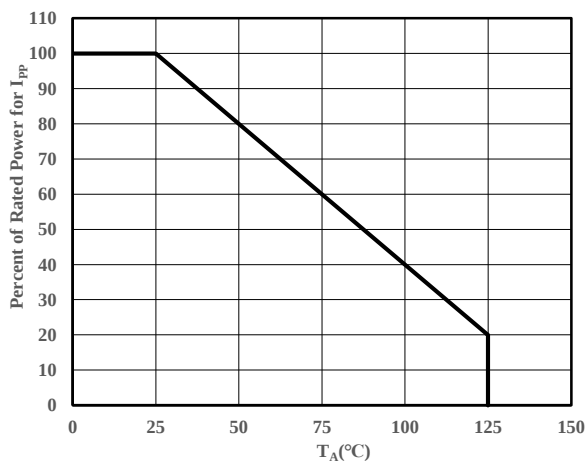
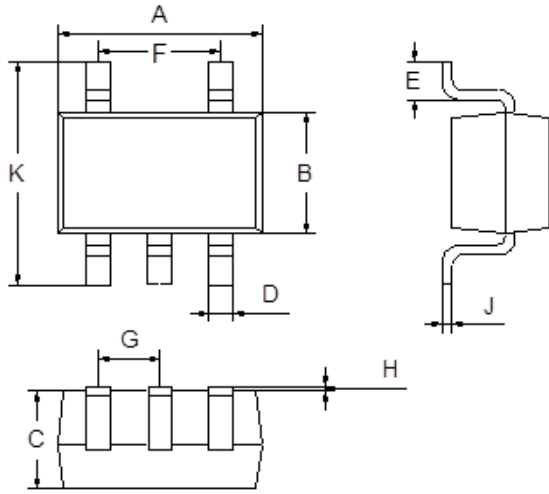


Fig 3 Power Derating Curve

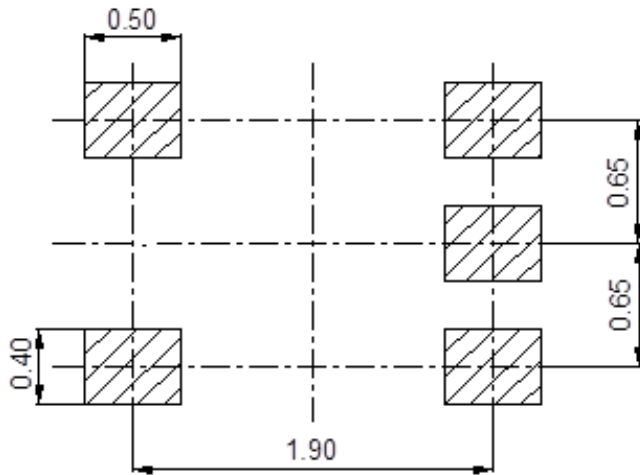
Package Outline Dimensions (Unit: mm)



SOT-353		
Dimension	Min.	Max.
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
F	1.20	1.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout (Unit: mm)

SOT-353



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