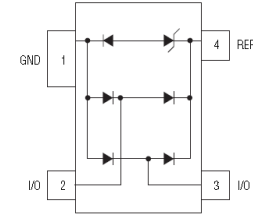


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 30 kV (air), ± 30 kV (contact)
- Low leakage current
- Protects 2 lines
- Low capacitance

HF



Mechanical Data

- Case: SOT-143
- 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
PSR03	SOT-143	3000 pcs / Tape & Reel	R03

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

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	$V_{\text{ESD-A}}$	± 30	kV
IEC 61000-4-2; ESD (Contact)	$V_{\text{ESD-C}}$	± 30	kV
Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	P_{PP}	200	W
Peak Pulse Current ($t_p = 8/20\mu\text{s}$)	I_{PP}	12	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Junction Temperature Range	T_J	$-55 \sim +125$	$^\circ\text{C}$
Storage Temperature Range	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 Stand-off Voltage	V_{RWM}		-	-	3.3	V
Reverse Breakdown Voltage	$V_{\text{(BR)}}$	$I_{\text{R}} = 1\text{mA}$	3.5	-	-	V
Reverse Leakage Current	I_{R}	$V_{\text{RWM}} = 3.3\text{V}$	-	-	1	μA
Clamping Voltage	V_{C}	$I_{\text{PP}} = 1\text{A}$, $t_p = 8/20\mu\text{s}$ (Pin 4 to Pin 1)	-	-	7	V
		$I_{\text{PP}} = 12\text{A}$, $t_p = 8/20\mu\text{s}$ (Pin 4 to Pin 1)	-	-	18	V
Junction Capacitance	C_{J}	$V_{\text{R}} = 0\text{V}$, $f = 1\text{MHz}$ (Pin 1 to Pin 3 or Pin 2)	-	-	4.5	pF

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

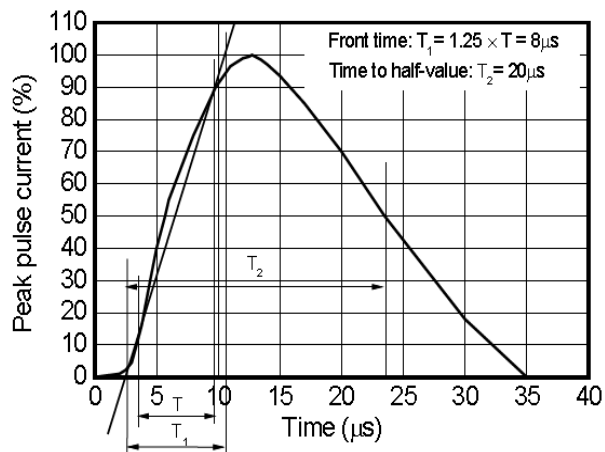


Fig 1 8/20 μs waveform per IEC61000-4-5

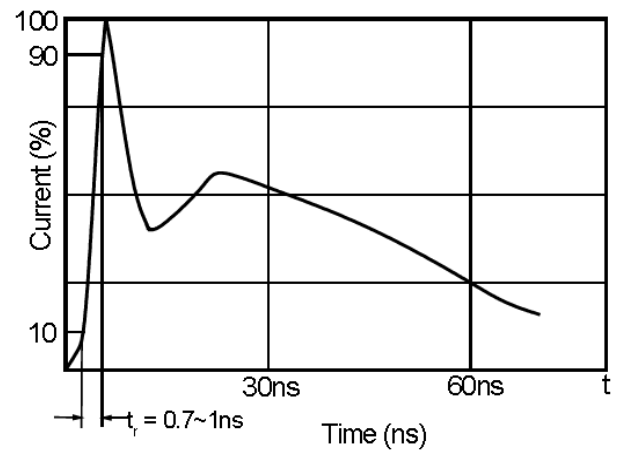


Fig 2 ESD pulse waveform according to
IEC61000-4-2

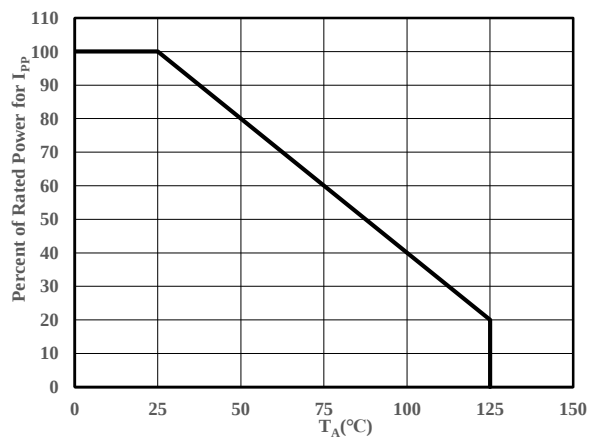
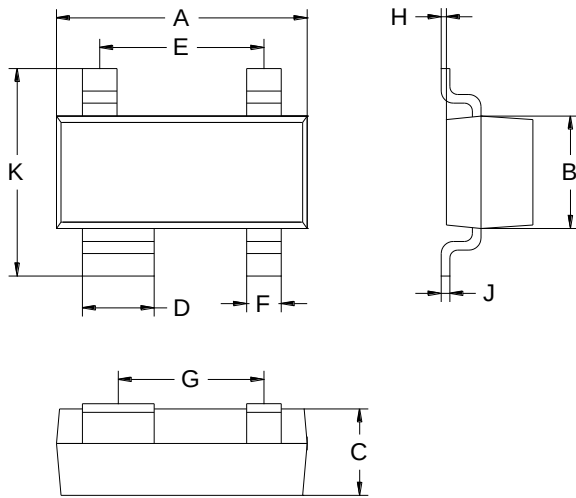


Fig 3 Power Derating Curve

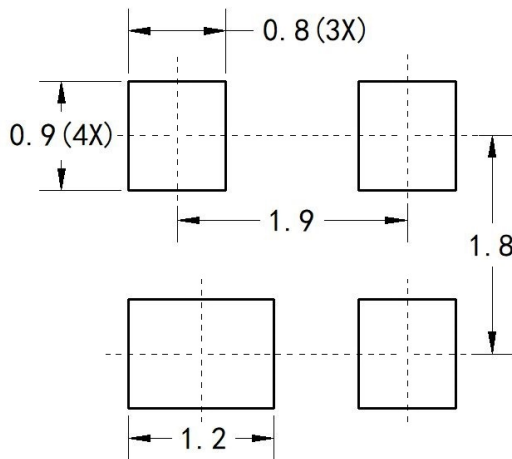
Package Outline Dimensions (Unit: mm)



SOT-143		
Dimension	Min.	Max.
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.78	0.88
E	1.80	2.00
F	0.37	0.43
G	1.59	1.79
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60

Package Outline Dimensions (Unit: mm)

SOT-143



IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.