

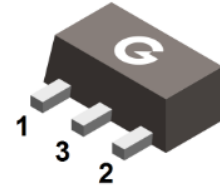
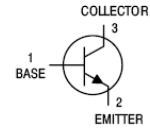
Features

- Epitaxial planar die construction
- Switching and amplification in high voltage
- Low current
- High voltage

HF

Mechanical Data

- Case: SOT-89
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208



SOT-89

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
CXT5551	SOT-89	1000 pcs / Tape & Reel	1G6

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	180	V
Collector-Emitter Breakdown Voltage	V _{CEO}	160	V
Emitter-Base Breakdown Voltage	V _{EBO}	6	V
Collector Current (Continuous)	I _C	0.6	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation *1	P _D	0.625	W
Thermal Resistance Junction-to-Air *1	R _{θJA}	200	°C/W
Thermal Resistance Junction-to-Air *2	R _{θJA}	60	°C/W
Thermal Resistance Junction-to-Case *2	R _{θJC}	30	°C/W
Thermal Resistance Junction-to-Lead *2	R _{θJL}	20	°C/W
Junction Temperature Range	T _J	-65 ~ +150	°C
Storage Temperature Range	T _{STG}	-65 ~ +150	°C

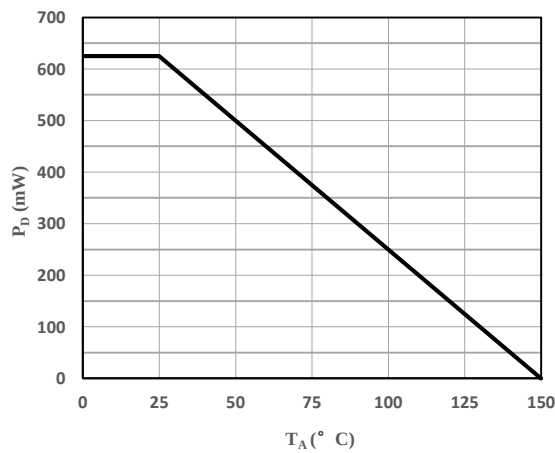
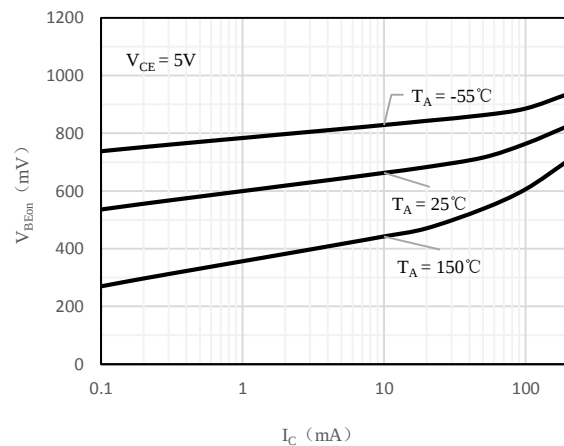
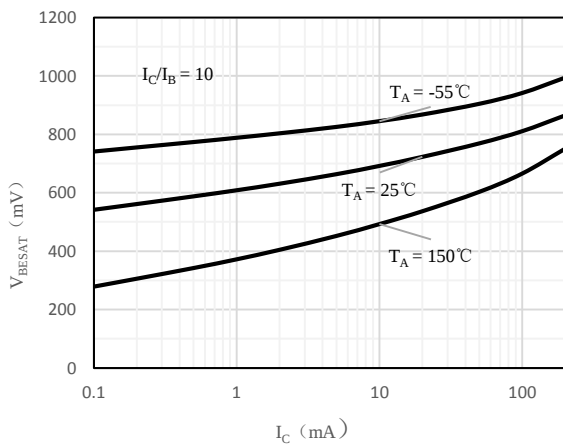
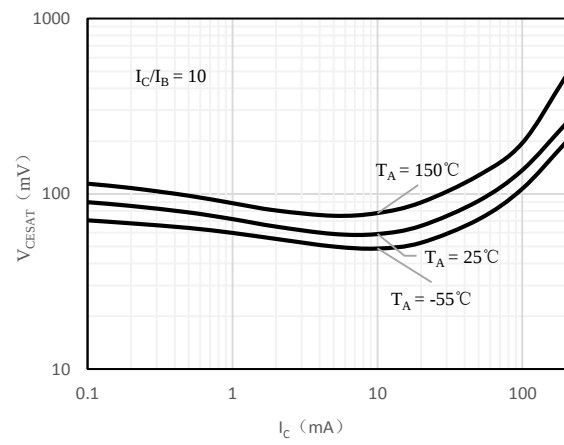
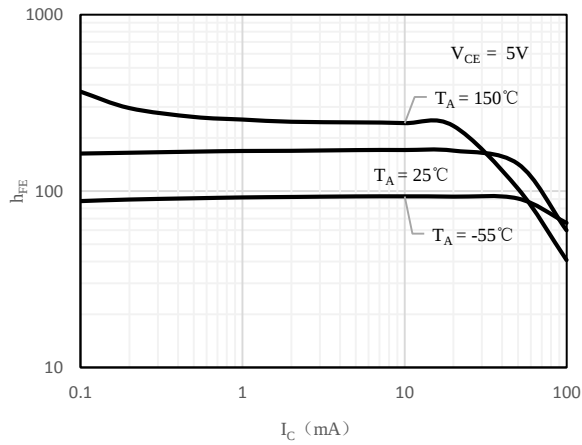
Notes:

1. The data tested by surface mounted on a minimum recommended FR-4 board
2. The data tested by surface mounted on a 1 inch² FR-4 board with 2OZ copper

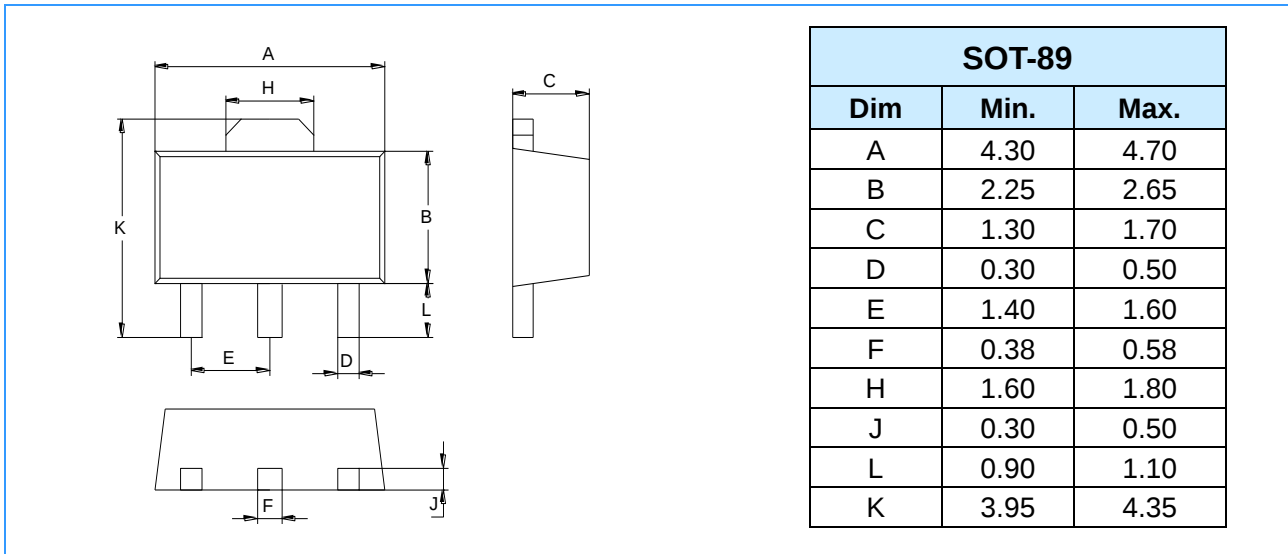
Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	180	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 0.1\text{mA}, I_B = 0$	160	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	6	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 120\text{V}, I_E = 0$	-	-	50	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$	-	-	50	nA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 1\text{mA}$	80	-	-	-
		$V_{CE} = 5\text{V}, I_C = 10\text{mA}$	100	-	300	-
		$V_{CE} = 5\text{V}, I_C = 50\text{mA}$	30	-	-	-
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$	-	-	0.15	V
		$I_C = 50\text{mA}, I_B = 5\text{mA}$	-	-	0.2	V
Base-emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$	-	-	1	V
		$I_C = 50\text{mA}, I_B = 5\text{mA}$	-	-	1	V
Collector-base Output Capacitance	C_{cbo}	$V_{CB} = 10\text{V}, f = 1\text{MHz}, I_E = 0$	-	-	6	pF
Current-Gain— Bandwidth Product	f_T	$I_C = 10\text{mA}, V_{CE} = 10\text{V}$ $f = 100\text{MHz}$	100	-	300	MHz
Small-signal current gain	h_{fe}	$I_C = 1\text{mA}, V_{CE} = 10\text{V}$ $F = 1.0\text{kHz}$	50	-	200	
Noise Figure	NF	$I_C = 200\mu\text{A}, V_{CE} = 5\text{V}$ $F = 10\text{-}15.7\text{kHz}, R_S = 1.0\Omega$	-	-	8	dB

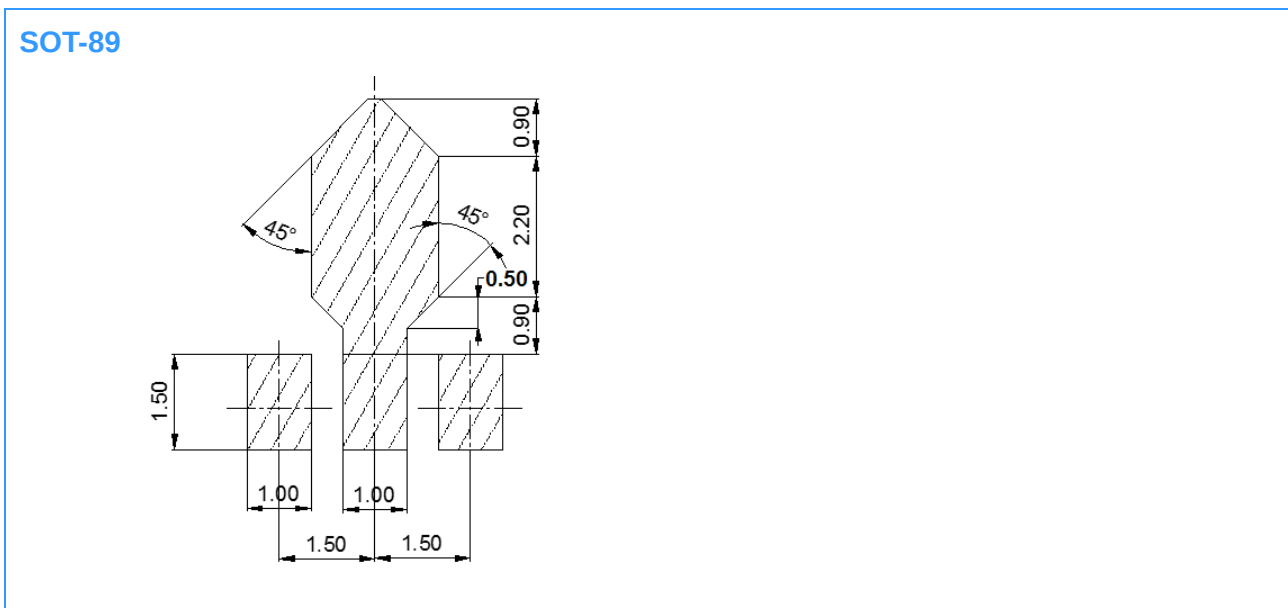
Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)



Package Outline Dimensions (Unit: mm)



Package Outline Dimensions (Unit: mm)



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.