

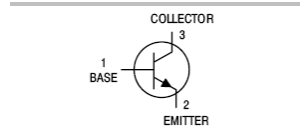
Features

- Low saturation voltage $V_{CE(SAT)}$
- Complementary to KTA1046

HF

Mechanical Data

- Case: ITO-220AB
- 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
KTC2026	ITO-220AB	50 pcs / Tube	KTC2026

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

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	V_{CBO}	60	V
Collector-Emitter Breakdown Voltage	V_{CEO}	60	V
Emitter-Base Breakdown Voltage	V_{EBO}	7	V
Collector Current (Continuous)	I_C	3	A
Collector Current (Pulse)	I_{CM}	5	A
Base Current (Continuous)	I_B	0.5	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	2	W
Thermal Resistance (Junction-to-Ambient) ^{*1}	$R_{\theta JA}$	55	$^\circ\text{C/W}$
Thermal Resistance (Junction-to-Case) ^{*1}	$R_{\theta JC}$	25	$^\circ\text{C/W}$
Thermal Resistance (Junction-to-Lead) ^{*1}	$R_{\theta JL}$	30	$^\circ\text{C/W}$
Junction Temperature	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Note 1: 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	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}$, $I_E = 0$	60	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50\text{mA}$, $I_B = 0$	60	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}$, $I_C = 0$	7	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 60\text{V}$, $I_E = 0$	-	-	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 7\text{V}$, $I_C = 0$	-	-	100	μA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$	100	-	300	-
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}$, $I_B = 0.2\text{A}$	-	-	1	V
Base-emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2\text{A}$, $I_B = 0.2\text{A}$	-	-	1.2	V
Base-Emitter Turn-On Voltage	$V_{BE(ON)}$	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{A}$	-	-	1	V
Output Capacitance	C_{OBO}	$V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$	-	35	-	pF
Transition Frequency	f_T	$I_C = 0.5\text{A}$, $V_{CE} = 5\text{V}$	-	30	-	MHZ

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

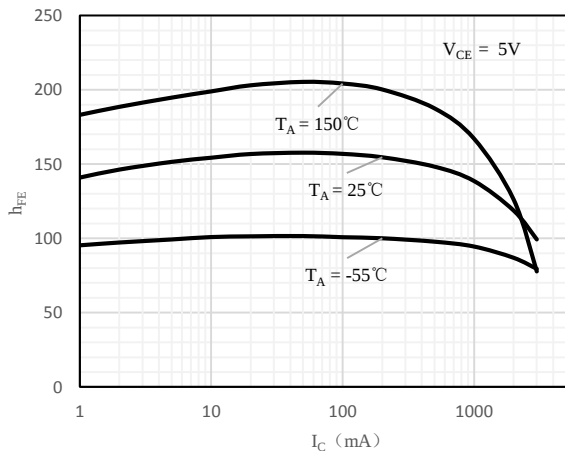


Fig 1 h_{FE} vs. I_C

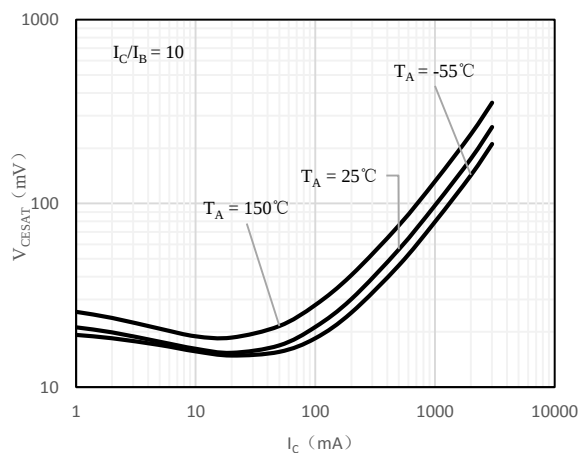


Fig 2 $V_{CE(sat)}$ vs. I_C

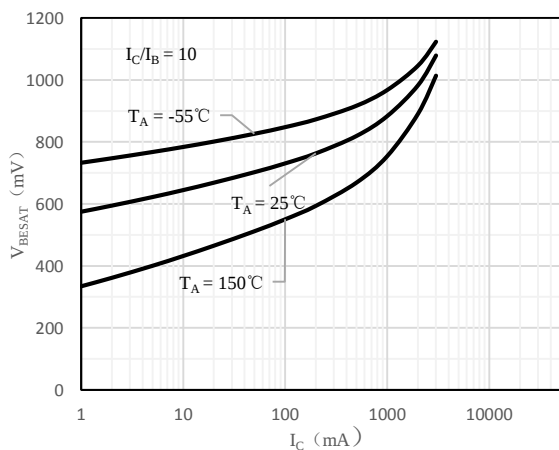


Fig 3 $V_{BE(sat)}$ vs. I_C

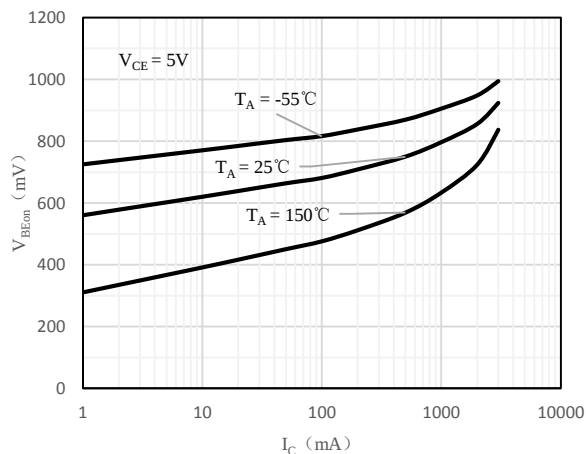


Fig 4 $V_{BE(on)}$ vs. I_C

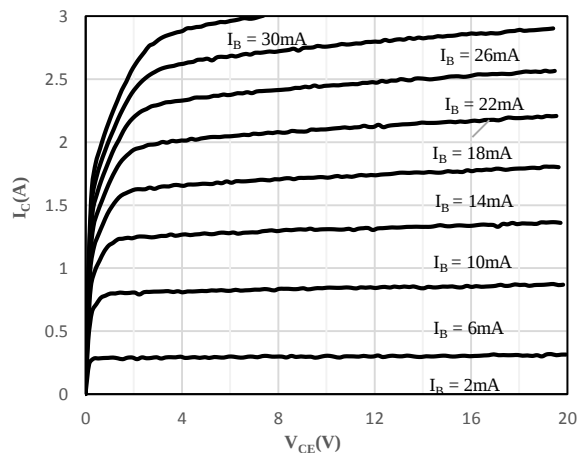


Fig 5 I_C vs. V_{CE}

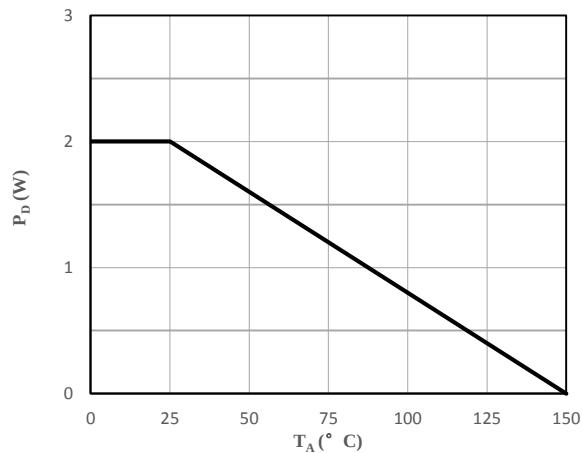


Fig 6 P_D vs. T_A

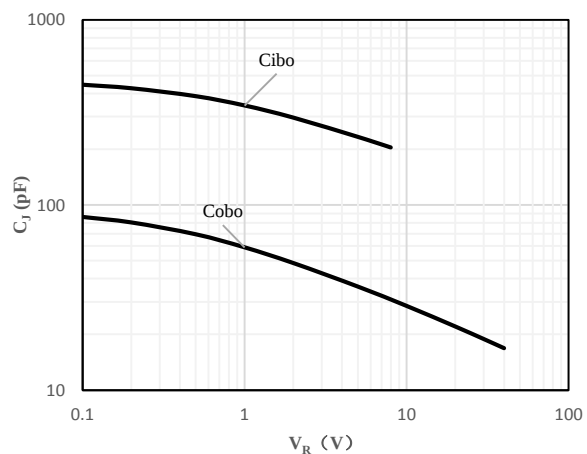
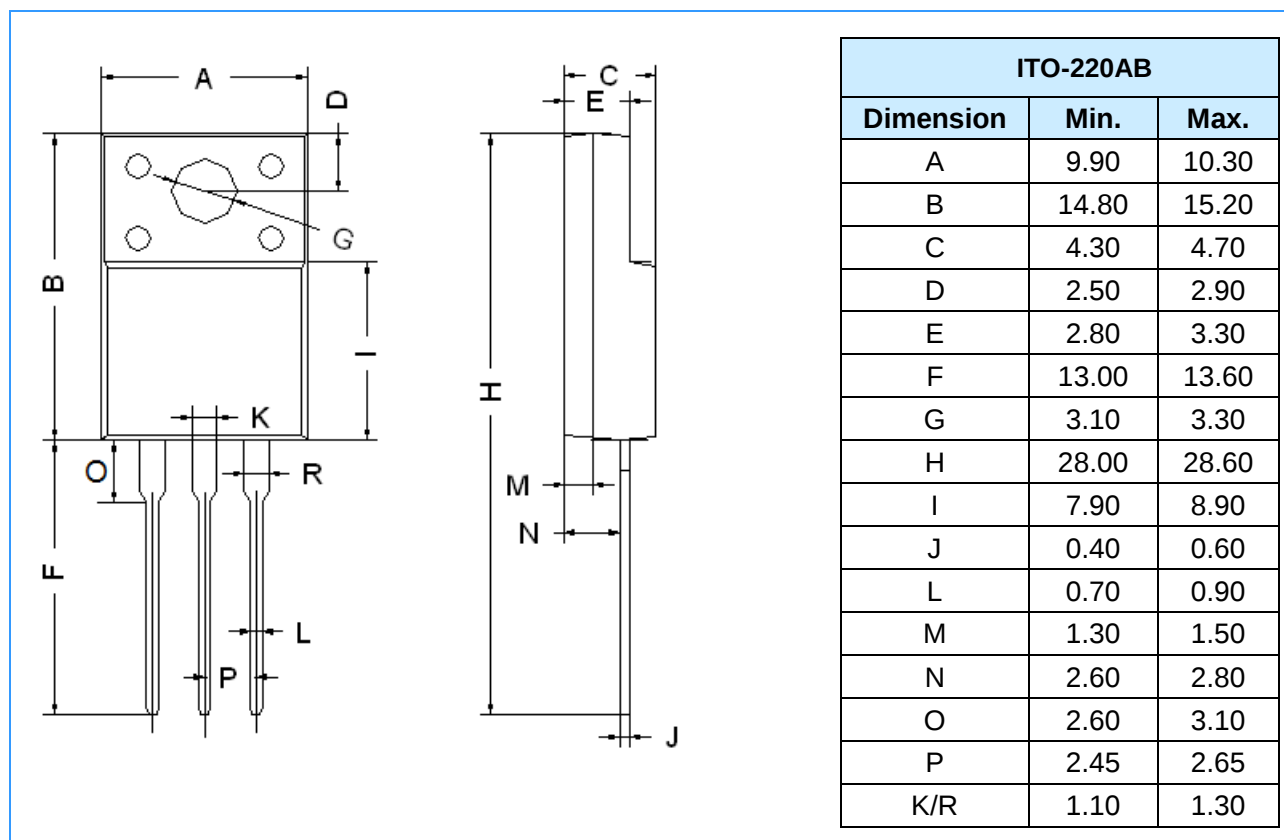


Fig 7 C_j vs. V_R

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.