

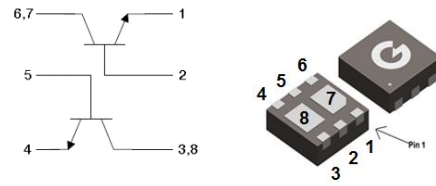
Features

- Low collector-emitter saturation voltage
- RoHS compliant with Halogen-free

HF

Mechanical Data

- Case: DFN2020-6LC
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208



DFN2020-6LC

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
GT4130DF2	DFN2020-6LC	3000 pcs / Tape & Reel	T4130

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	30	V
Collector-Emitter Breakdown Voltage	V _{CEO}	30	V
Emitter-Base Breakdown Voltage	V _{EBO}	6	V
Collector Current (Continuous)	I _C	1	A
Collector Current (Peak)	I _{CM}	2	A

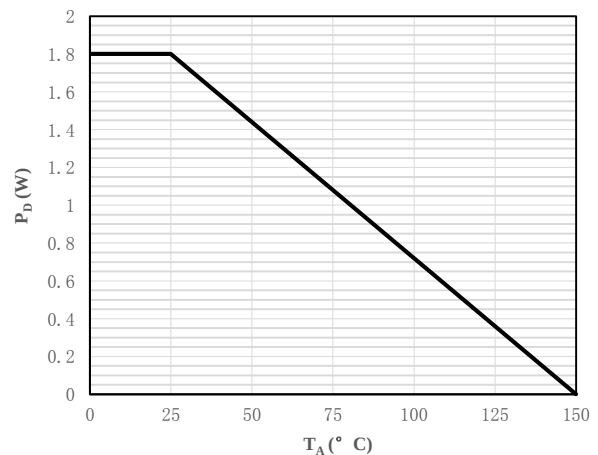
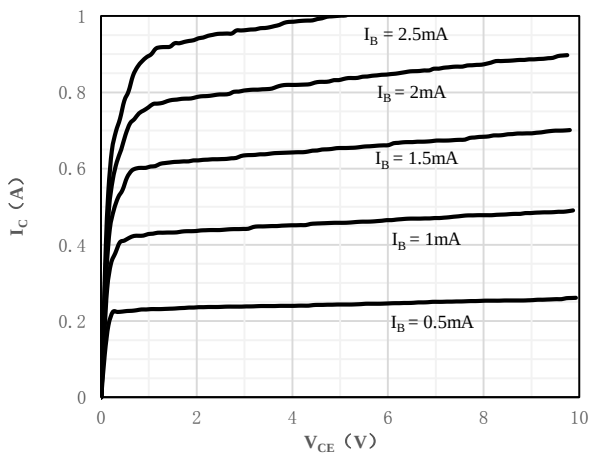
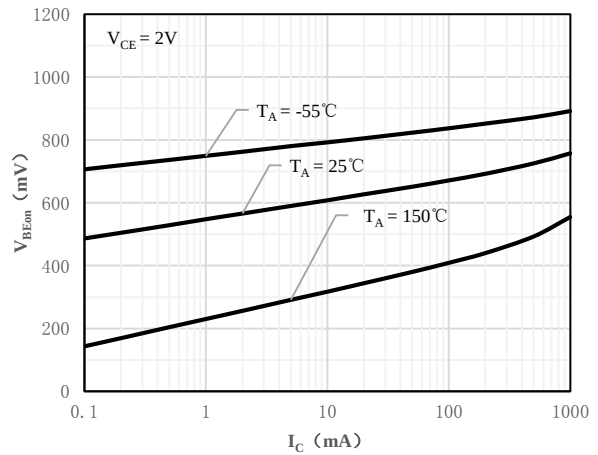
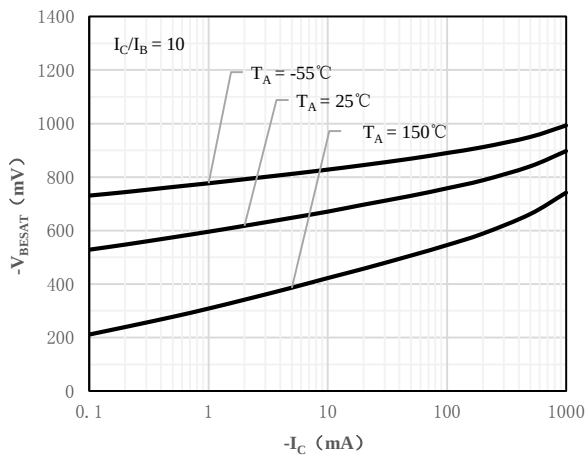
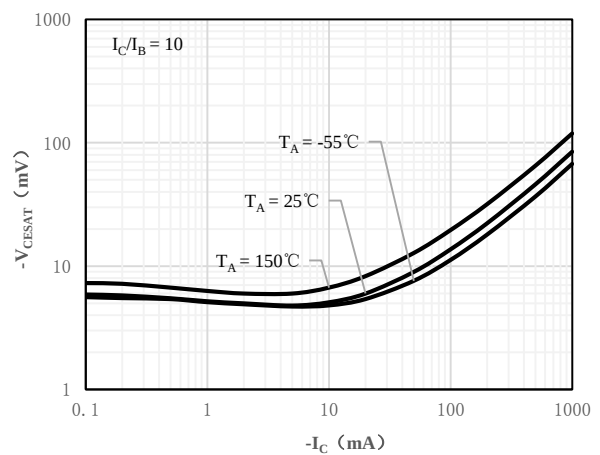
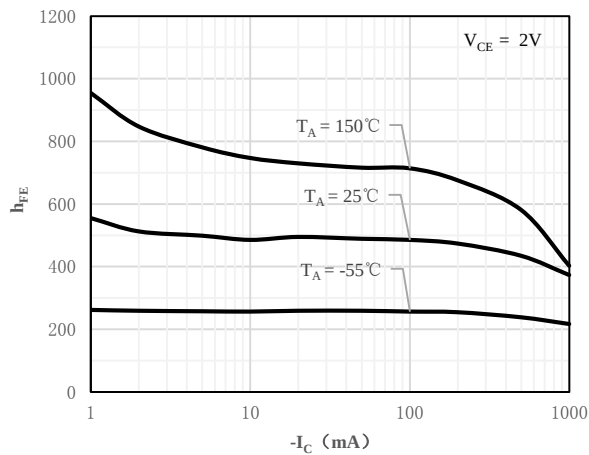
Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation (T _A = 25°C)	P _D	1.8	W
Junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	30	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B = 0$	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}, I_C = 0$	6	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 24\text{V}, I_E = 0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	-	-	0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 100\text{mA}$	240	-	-	-
		$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	210	-	-	-
		$V_{CE} = 2\text{V}, I_C = 1\text{A}$	180	-	-	-
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	-	-	100	mV
		$I_C = 1\text{A}, I_B = 50\text{mA}$	-	-	200	mV
		$I_C = 1\text{A}, I_B = 100\text{mA}$	-	-	190	mV
Base-emitter Saturation Resistance	$R_{CE(sat)}$	$I_C = 1\text{A}, I_B = 100\text{mA}$	-	-	190	$\text{m}\Omega$
Base-emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$	-	-	1	V
		$I_C = 1\text{A}, I_B = 50\text{mA}$	-	-	1.1	V
		$I_C = 1\text{A}, I_B = 100\text{mA}$	-	-	1.1	V
Base-emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	-	-	0.9	V
Output Capacity	C_{ob}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$	-	10	-	pF
Current-Gain—Bandwidth Product	f_T	$I_C = 50\text{mA}, V_{CE} = 10\text{V}$ $f = 100\text{MHz}$	90	-	-	MHz

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



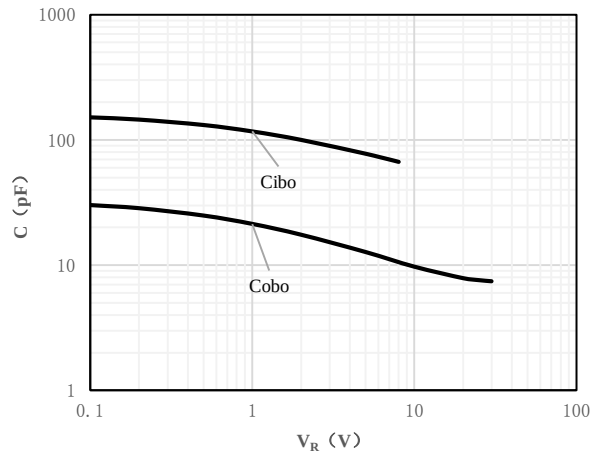
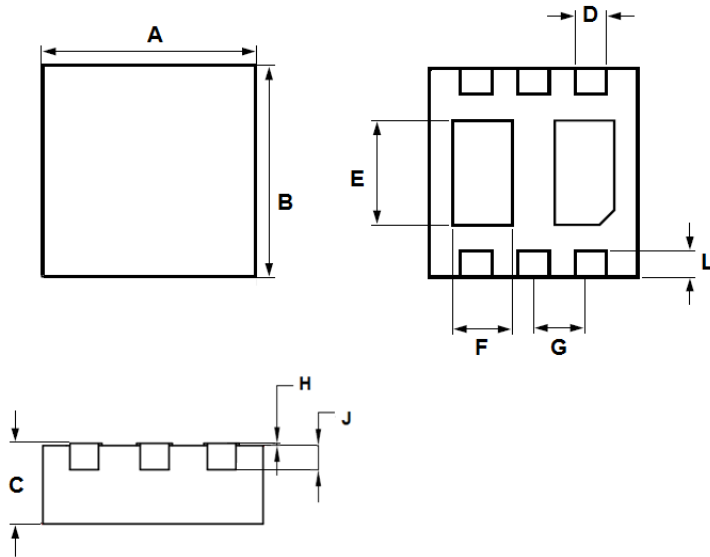


Fig 7 C_J vs. V_R

Package Outline Dimensions (Unit: mm)



DFN2020-6LC		
Dimension	Min.	Max.
A	1.900	2.100
B	1.900	2.100
C	0.500	0.600
D	0.250	0.350
E	0.800	1.000
F	0.600	0.800
G	0.550	0.750
H	0.000	0.050
J	0.103	0.303
L	0.174	0.326

Mounting Pad Layout (Unit: mm)

DFN2020-6LC

