

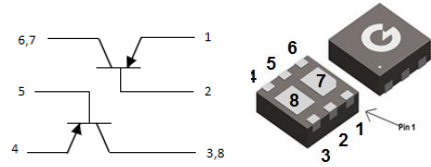
Features

- 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
GT5130DF2	DFN2020-6LC	3000 pcs / Tape & Reel	T5130

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

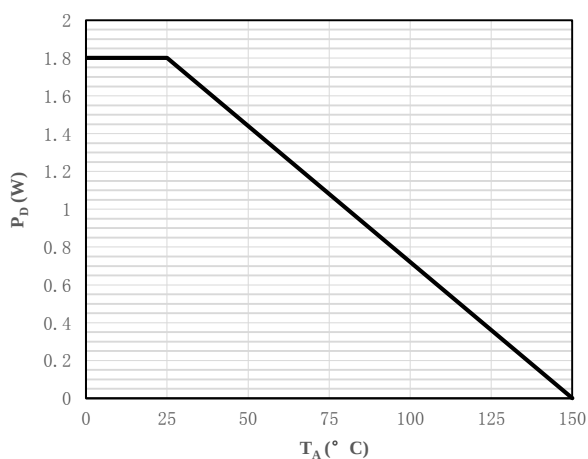
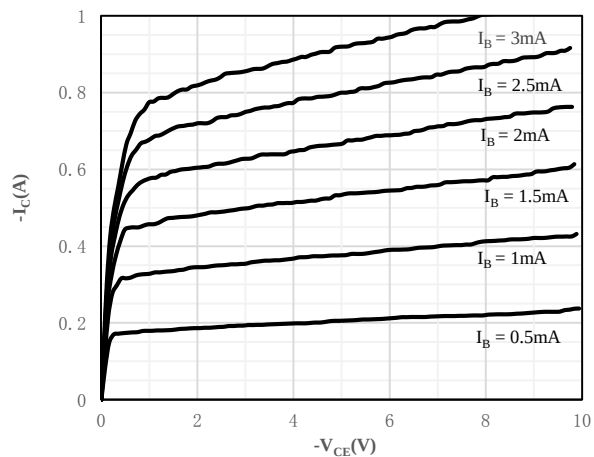
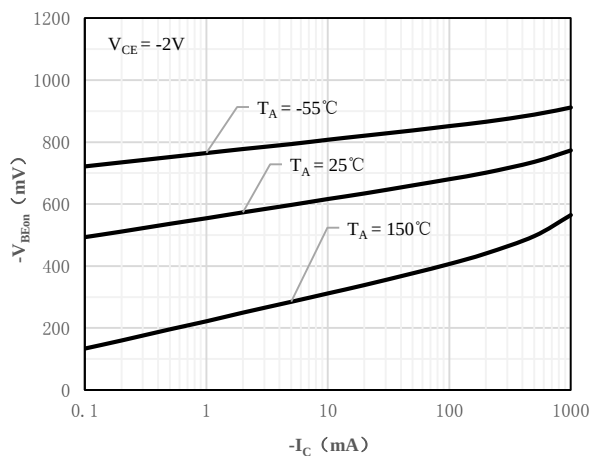
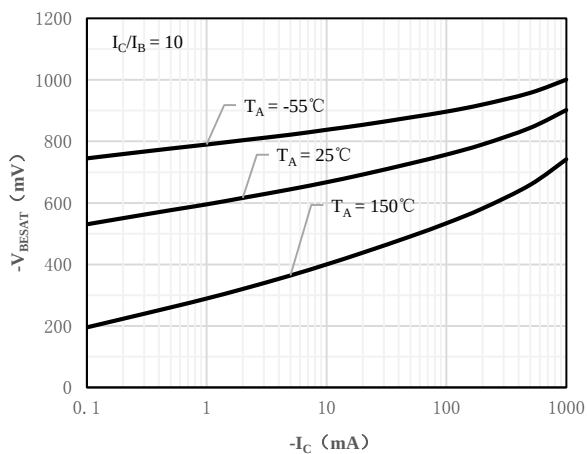
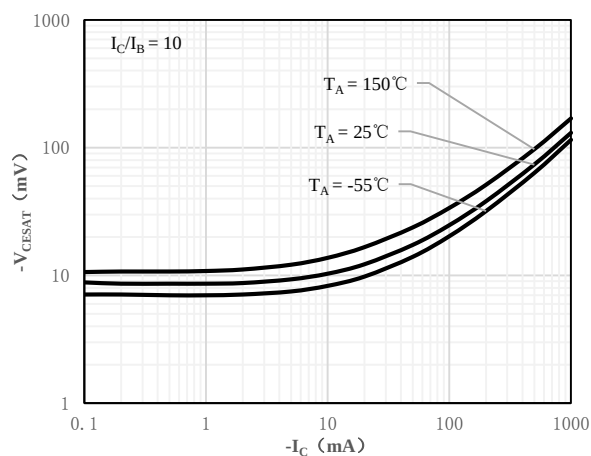
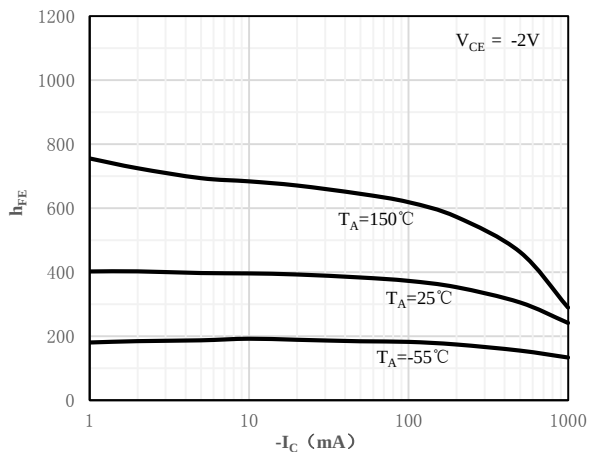
Thermal Characteristics

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}	$V_{CE} = -2\text{V}, I_C = -100\text{mA}$	250	-	-	-
		$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	170	-	-	-
		$V_{CE} = -2\text{V}, I_C = -1\text{A}$	120	-	-	-
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-	-140	mV
		$I_C = -1\text{A}, I_B = -50\text{mA}$	-	-	-280	mV
		$I_C = -1\text{A}, I_B = -100\text{mA}$	-	-	-250	mV
Base-emitter Saturation Resistance	$R_{CE(sat)}$	$I_C = -1\text{A}, I_B = -100\text{mA}$	-	-	-250	$\text{m}\Omega$
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	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}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$	-	-	17	pF
Current-Gain—Bandwidth Product	f_T	$I_C = -50\text{mA}, V_{CE} = -10\text{V}$ $f = 100\text{MHz}$	65	-	-	MHz

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



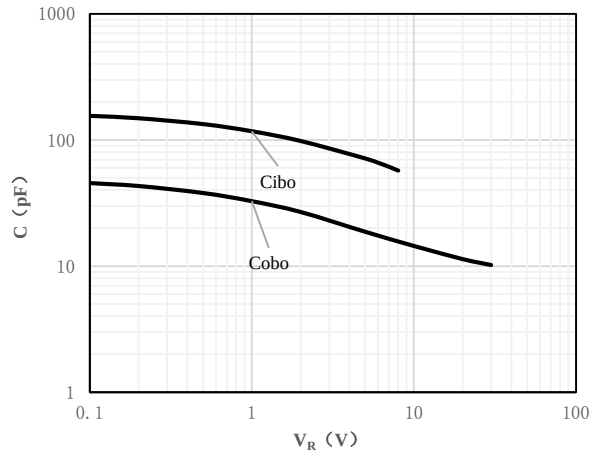
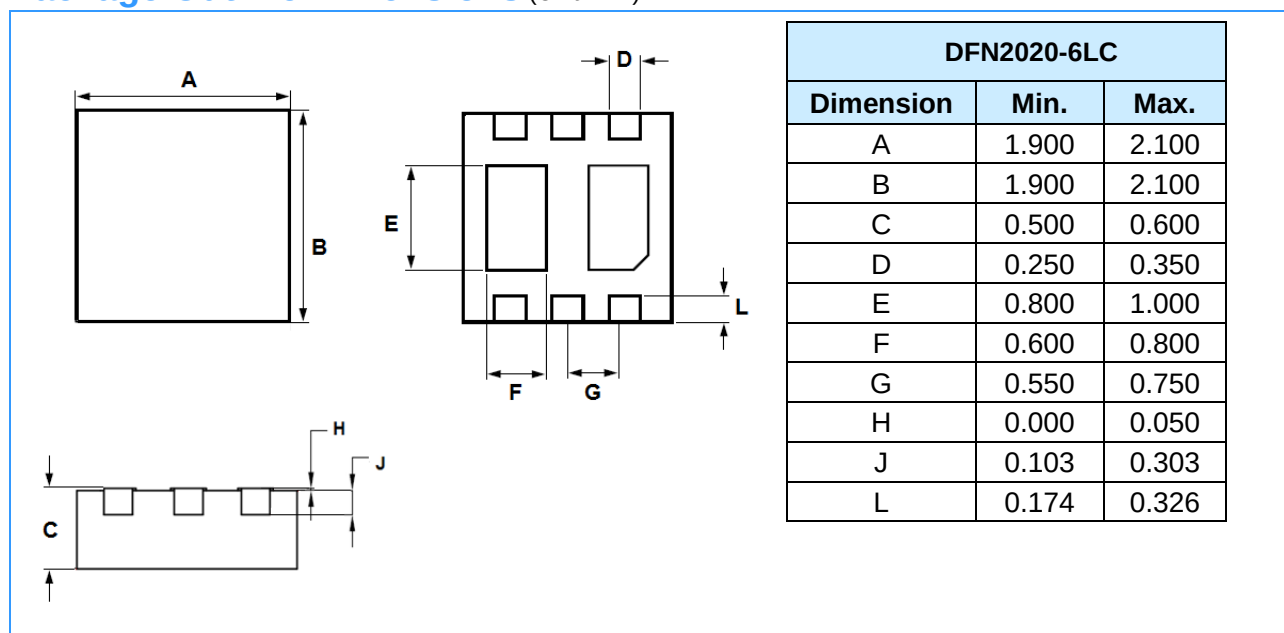


Fig 7 C_J vs. V_R

Package Outline Dimensions (Unit: mm)



Mounting Pad Layout (Unit: mm)

