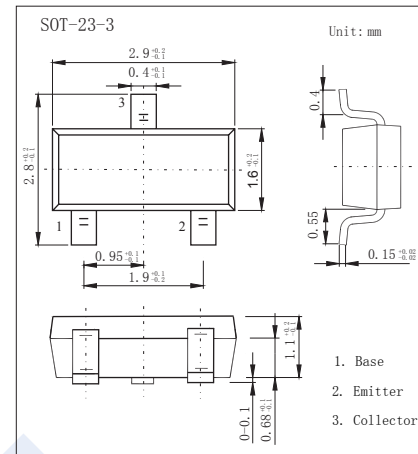


NPN Transistors

KTC3551T-HF

■ Features

- Adoption of MBIT Processes.
- Large Current Capacitance.
- Low Collector-to-Emitter Saturation Voltage.
- High-Speed Switching.
- High Allowable Power Dissipation.
- Complementary to KTA1551T-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	80	V
Collector - Emitter Voltage	V_{CES}	80	
	V_{CEO}	50	
Emitter - Base Voltage	V_{EBO}	5	A
Collector Current - Continuous	I_C	1	
Collector Current - Pulse	I_{CP}	3	
Collector Power Dissipation	P_C	0.9	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	

NPN Transistors

KTC3551T-HF

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100\ \mu\text{A}$, $I_E = 0$	80			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\ \text{mA}$, $I_B = 0$	50			
	V_{CES}	$I_C = 100\ \mu\text{A}$, $V_{BE} = 0$	80			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\ \mu\text{A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 80\ \text{V}$, $I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\ \text{V}$, $I_C = 0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\ \text{mA}$, $I_B = 10\ \text{mA}$			190	mV
		$I_C = 300\ \text{mA}$, $I_B = 6\ \text{mA}$			135	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500\ \text{mA}$, $I_B = 10\ \text{mA}$			1.2	V
DC current gain	h_{FE}	$V_{CE} = 2\ \text{V}$, $I_C = 100\ \text{mA}$	200		560	
Turn-On Time	t_{on}			35		ns
Storage Time	t_{stg}			330		
Fall Time	t_f			40		
Collector output capacitance	C_{ob}	$V_{CB} = 10\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		6		pF
Transition frequency	f_T	$V_{CE} = 10\ \text{V}$, $I_C = 300\ \text{mA}$		420		MHz

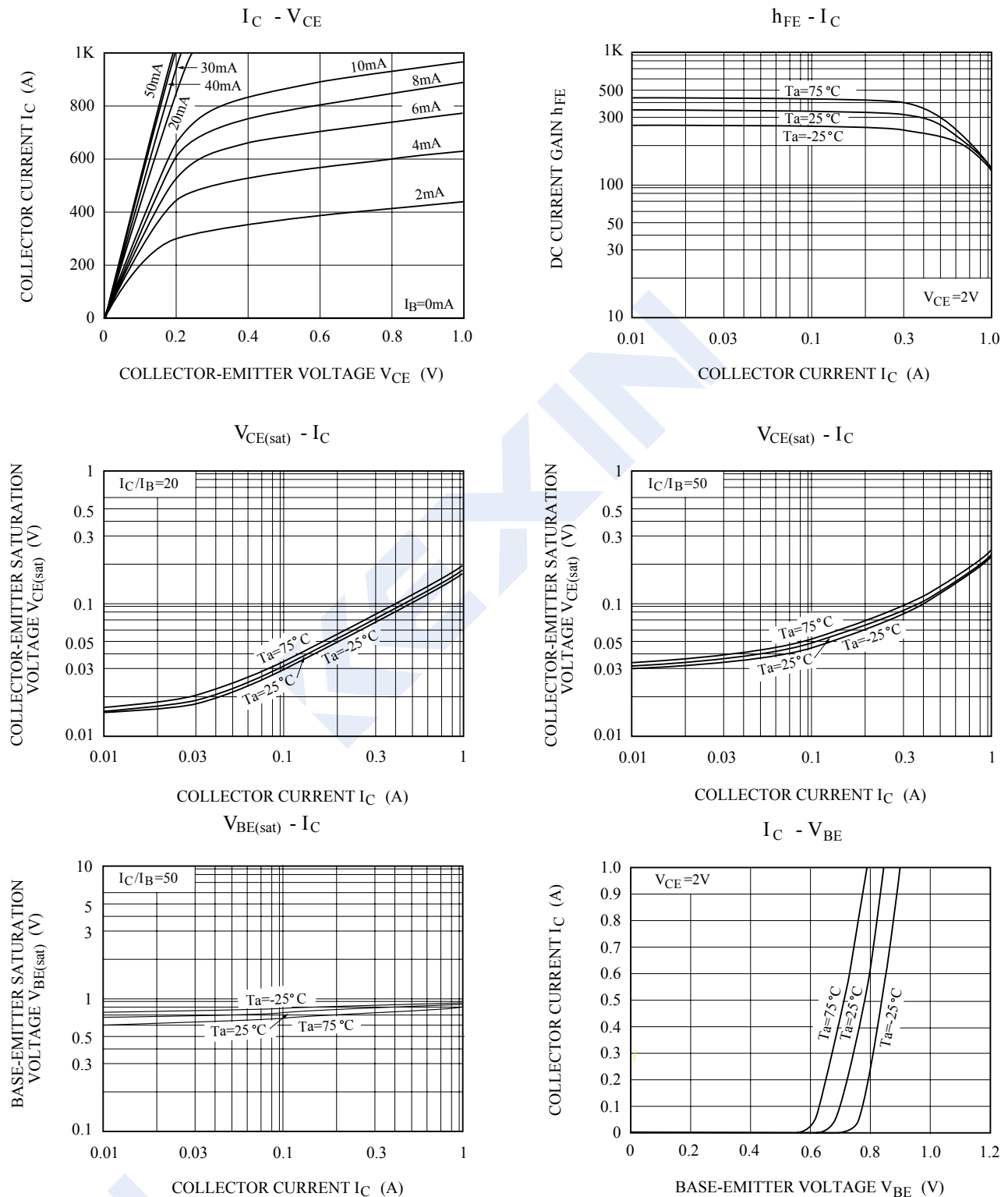
■ Marking

Marking	HK F
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NPN Transistors

KTC3551T-HF

■ Typical Characteristics



NPN Transistors

KTC3551T-HF

■ Typical Characteristics

