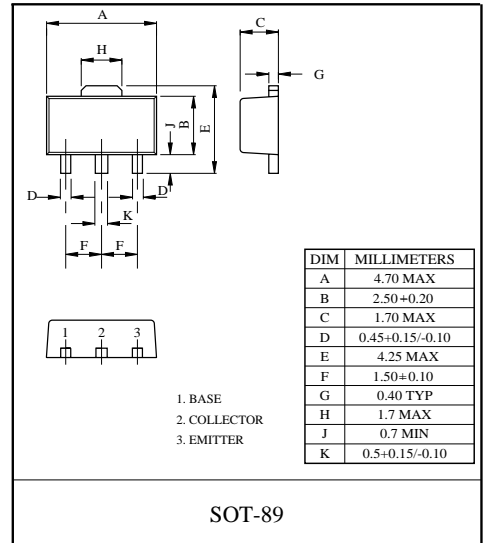


## FTC4379 TRANSISTOR (NPN)

### FEATURES

- Complementary to FTA1666
- Small Flat Package
- Low Saturation Voltage
- Power Amplifier and Switching Application



### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	50	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	2	A
P <sub>C</sub>	Collector Power Dissipation	500	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	250	°C/W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

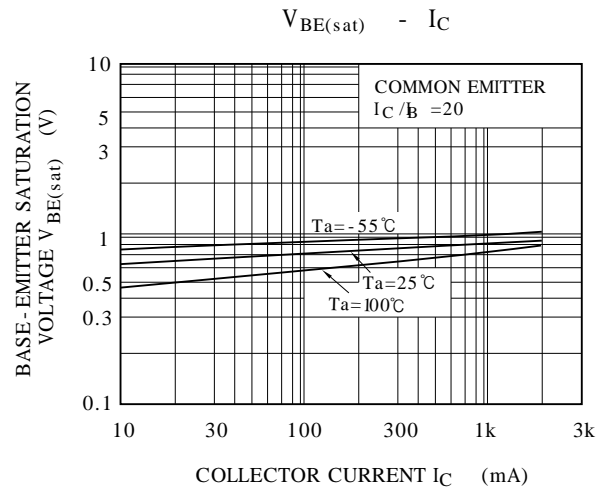
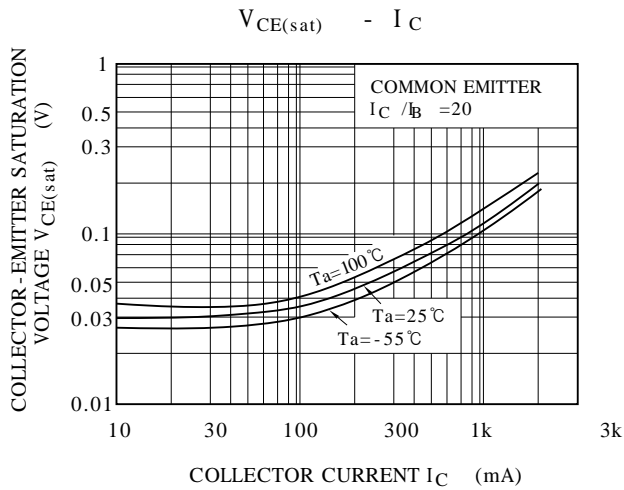
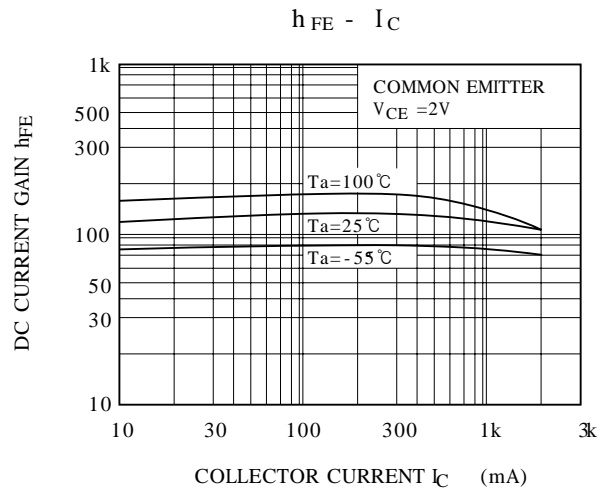
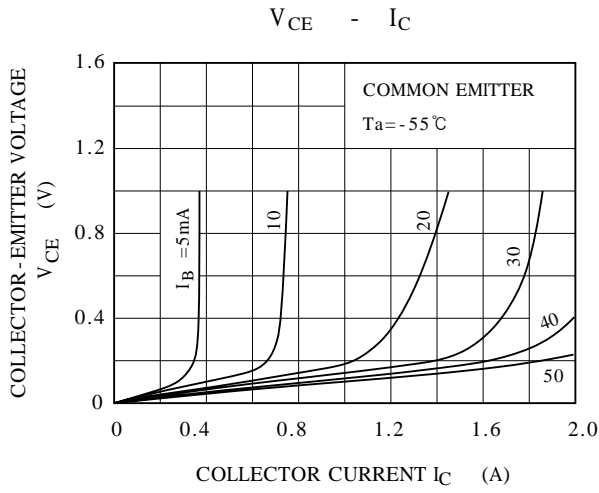
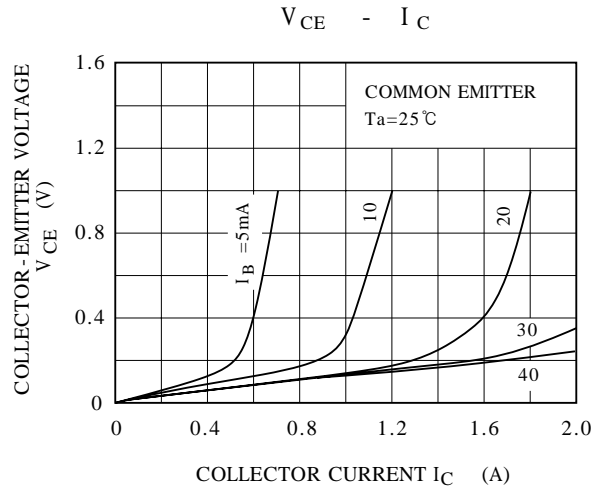
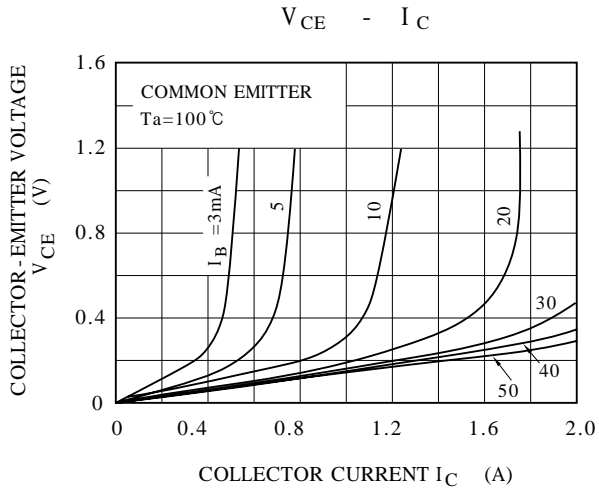
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 1mA, I <sub>E</sub> =0	50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 1mA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0			100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			100	nA
DC current gain	h <sub>FE(1)</sub> *	V <sub>CE</sub> =2V, I <sub>C</sub> = 500mA	70		240	
	h <sub>FE(2)</sub> *	V <sub>CE</sub> =2V, I <sub>C</sub> = 1.5A	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> = 1A, I <sub>B</sub> = 50mA			0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub> *	I <sub>C</sub> = 1A, I <sub>B</sub> = 50mA			1.2	V
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz			40	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 500mA		120		MHz
Switching Time	Turn on time	t <sub>on</sub>		0.1		uS
	Storage time	t <sub>stg</sub>		1.0		
	Fall time	t <sub>f</sub>		0.1		

\*Pulse test: pulse width ≤300mS, duty cycles ≤ 2.0%.

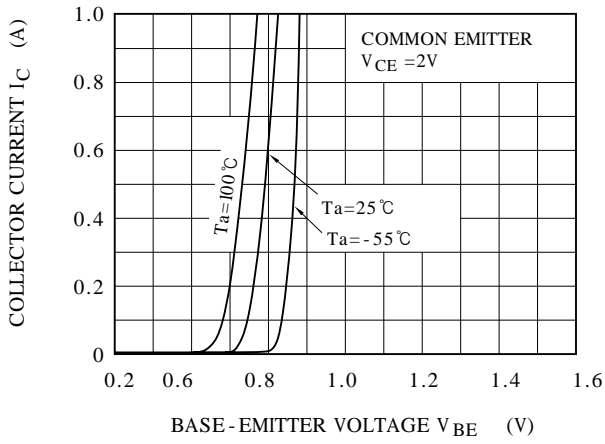
### CLASSIFICATION OF h<sub>FE(1)</sub>

RANK	O	Y
RANGE	70 - 140	120 - 240
MARKING	UO	UY

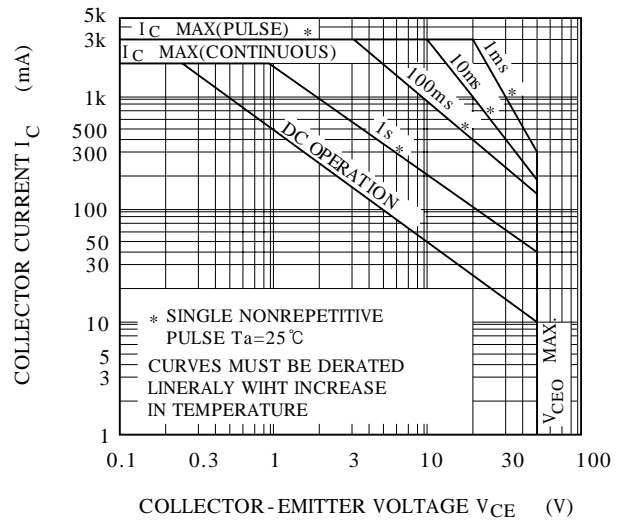
# FTC4379



$I_C - V_{BE}$



SAFE OPERATING AREA



$P_C - T_a$

