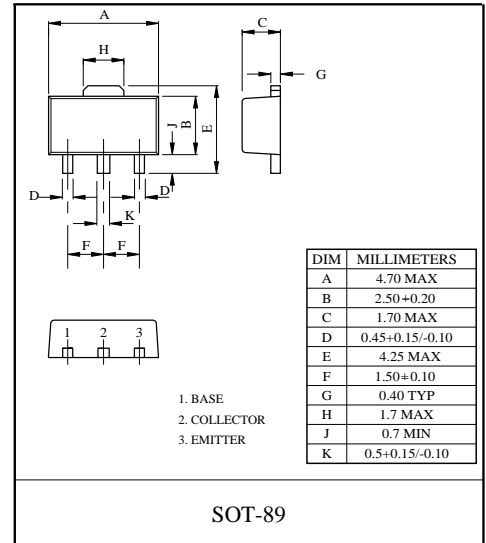


FTC4379 TRANSISTOR (NPN)

FEATURES

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



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	2	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^\circ\text{C}/\text{W}$
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

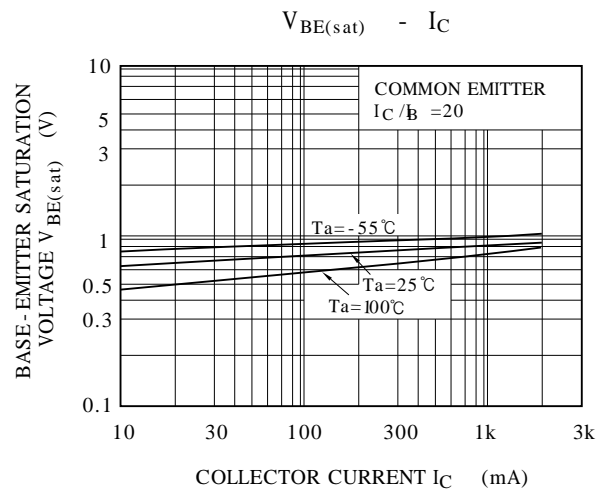
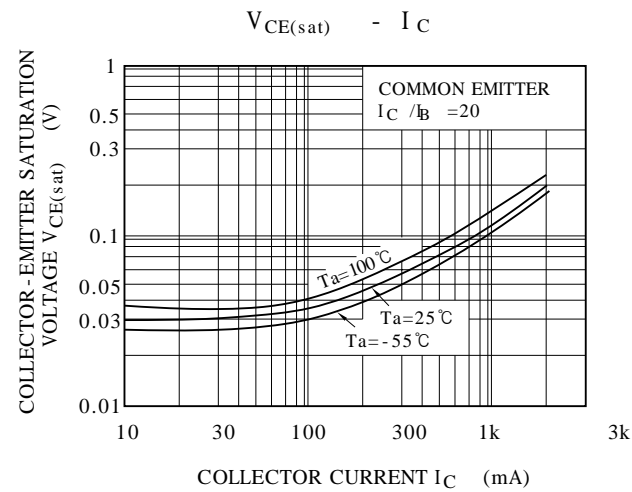
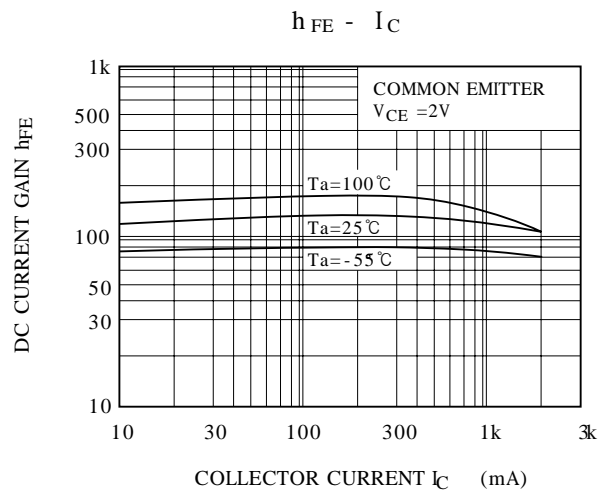
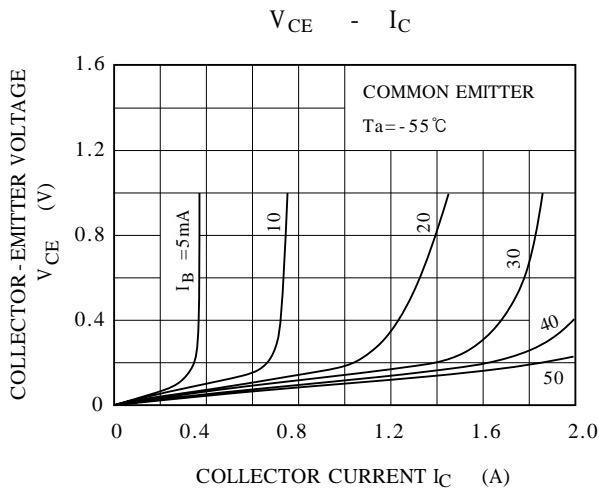
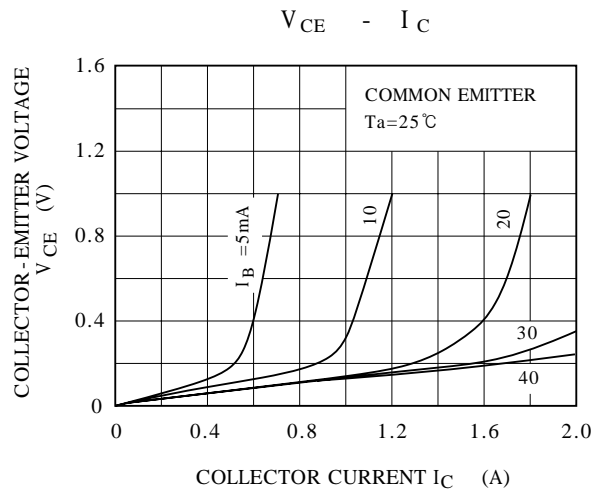
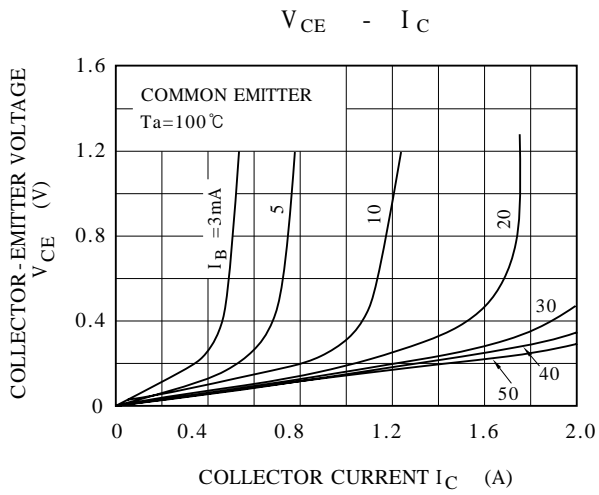
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			100	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	70		240	
	$h_{FE(2)}^*$	$V_{CE}=2\text{V}, I_C=1.5\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=1\text{A}, I_B=50\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=1\text{A}, I_B=50\text{mA}$			1.2	V
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			40	pF
Transition frequency	f_T	$V_{CE}=2\text{V}, I_C=500\text{mA}$		120		MHz
Switching Time	Turn on time	t_{on}		0.1		uS
	Storage time	t_{stg}		1.0		
	Fall time	t_f		0.1		

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycle $\leq 2.0\%$.

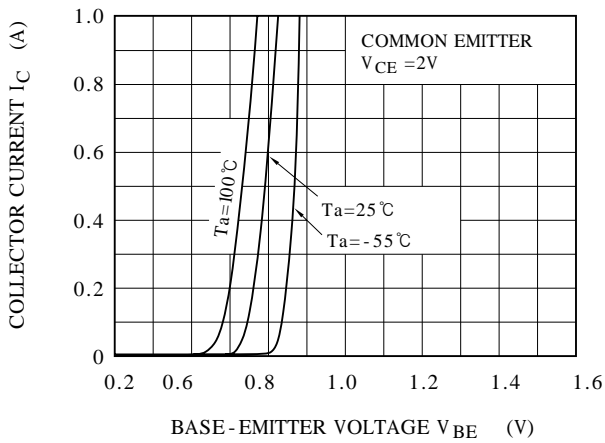
CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	70 - 140	120 - 240
MARKING	WO	WY

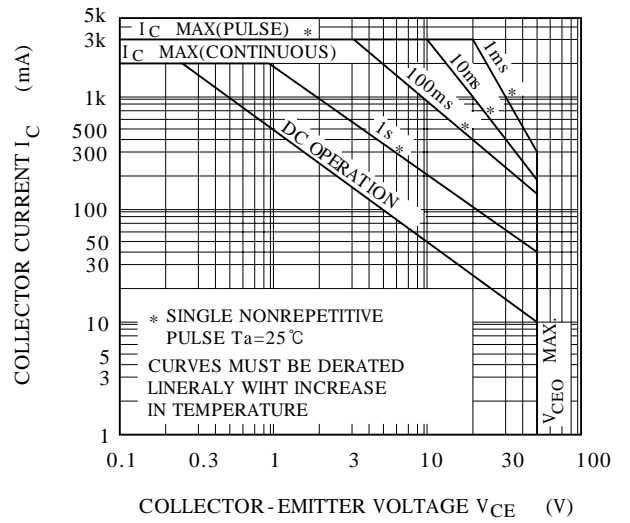
FTC4379



$I_C - V_{BE}$



SAFE OPERATING AREA



$P_C - T_a$

