

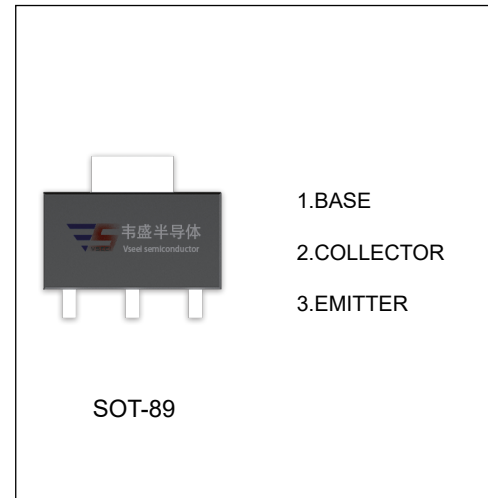
KTC4379 TRANSISTOR (NPN)

FEATURES

- Low saturation voltage
- High speed switching time
- Complementary to KTA1666

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	2	A
P _C	Collector Power Dissipation	500	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~150	°C

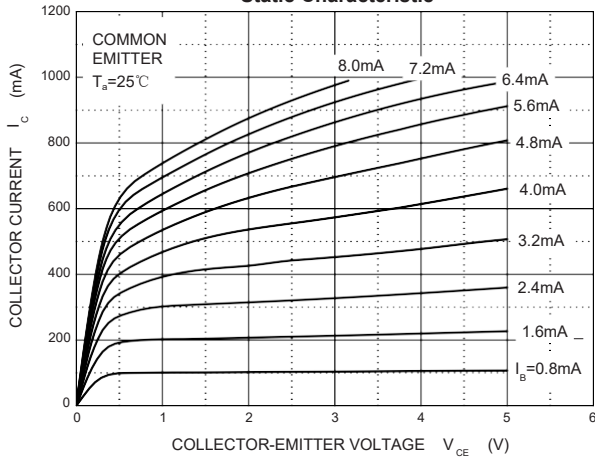
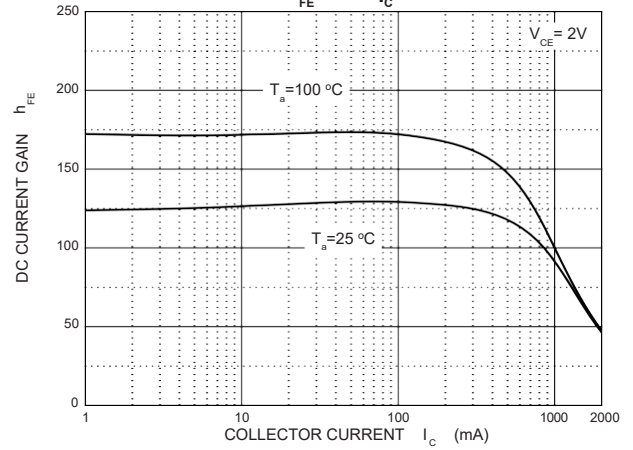
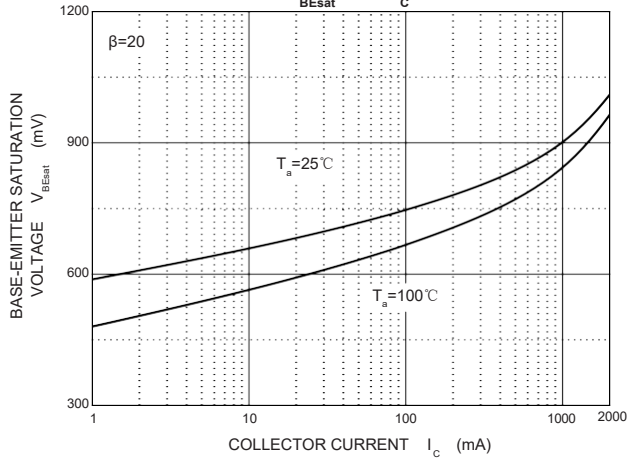
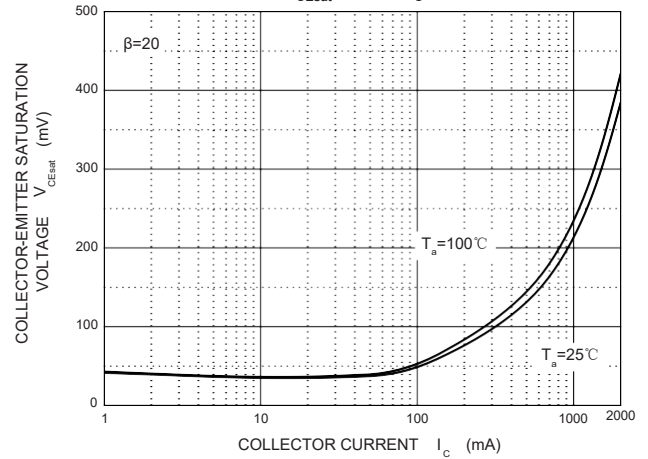
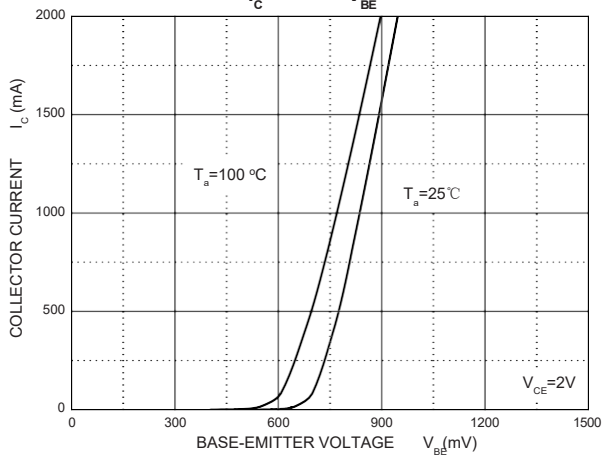
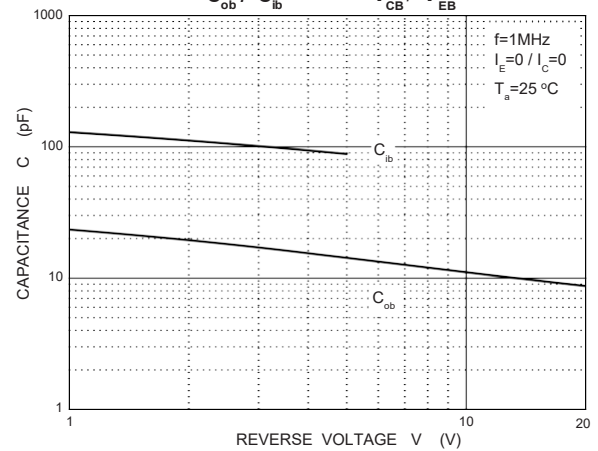


ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =1mA, I _C =0	5			V
Collector cut-off current	I _{CB0}	V _{CB} =50V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =2V, I _C =500mA	70		240	
	h _{FE(2)}	V _{CE} =2V, I _C =1.5A	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =1A, I _B =50mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =1A, I _B =50mA			1.2	V
Transition frequency	f _T	V _{CE} =2V, I _C =500mA		120		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		30		pF
Switching Time	Turn on Time	t _{on}	V _{CC} =30V, I _C =1A, I _{B1} =-I _{B2} =-0.05A	0.1		μs
	Storage Time	t _{stg}		1.0		
	Fall Time	t _f		0.1		

CLASSIFICATION OF h_{FE(1)}

Rank	O	Y
Range	70-140	120-240
Marking	UO	UY

Static Characteristic

 $h_{FE} - I_c$

 $V_{BEsat} - I_c$

 $V_{CEsat} - I_c$

 $I_c - V_{BE}$

 $C_{ob} / C_{ib} - V_{CB} / V_{EB}$

 $P_c - T_a$
