

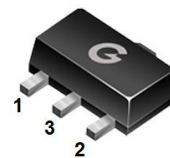
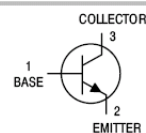
Features

- High speed switching time
- Low saturation voltage
- Complementary to KTA1666
- RoHS compliant with Halogen-free

HF

Mechanical Data

- Case: SOT-89
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Tin-plated; solderability per MIL-STD-202, Method 208



SOT-89

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
KTC4379-O	SOT-89	1000 pcs / Tape & Reel	UO
KTC4379-Y	SOT-89	1000 pcs / Tape & Reel	UY

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	50	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current (Continuous)	I _C	2	A
Base Current (Continuous)	I _B	0.4	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	500	mW
Operating Junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

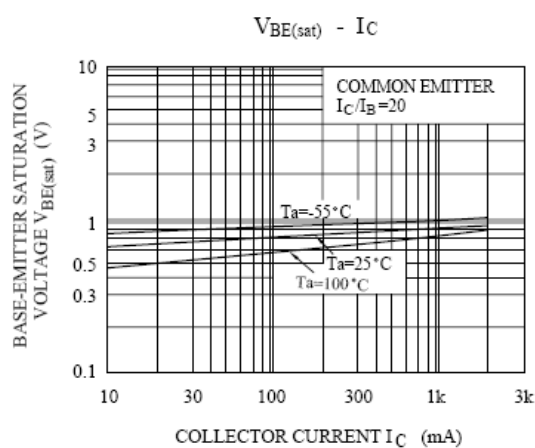
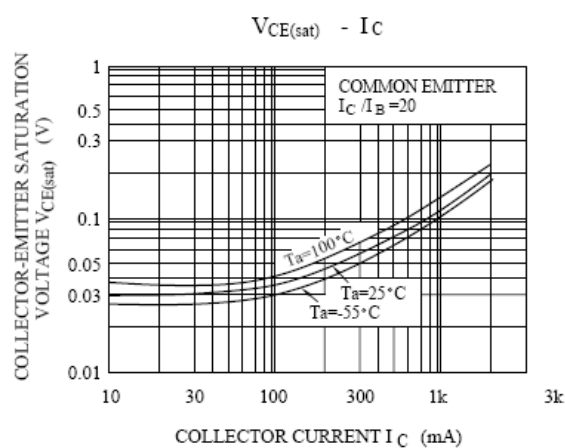
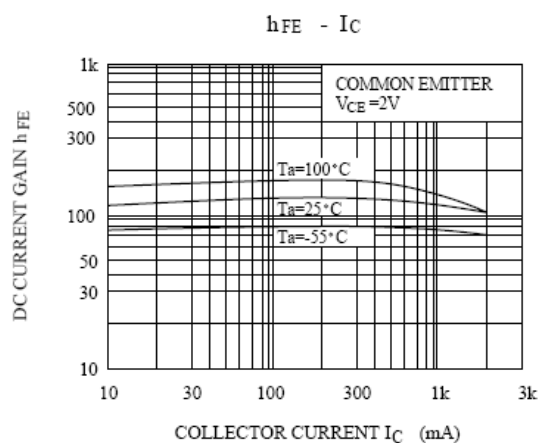
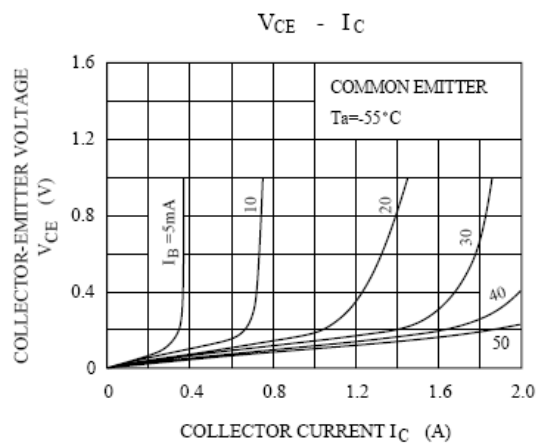
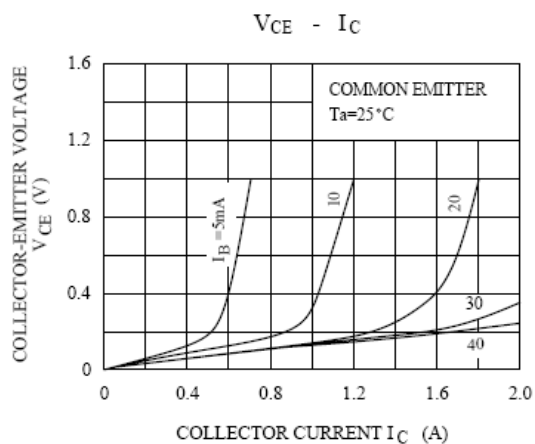
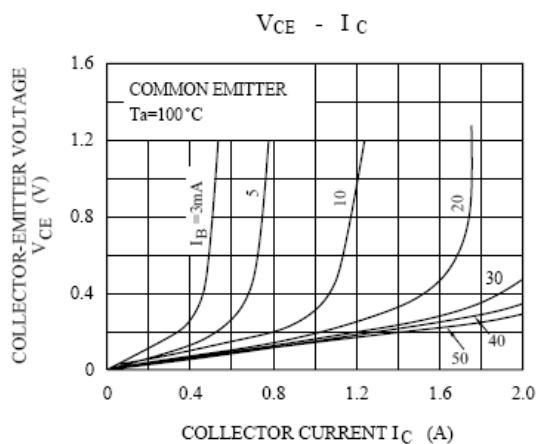
Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1\text{mA}, I_E = 0$	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}	$V_{CB} = 50\text{V}, I_E = 0$	-	-	0.1	μA
Emitter-base Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$	-	-	0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	70	-	240	-
		$V_{CE} = 2\text{V}, I_C = 1.5\text{A}$	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
Transition Frequency	f_T	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$	-	120	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0$ $f = 1\text{MHz}$	-	30	-	pF

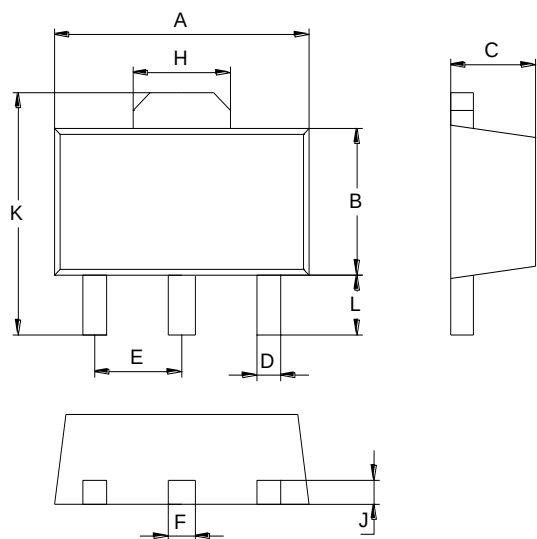
Classification of h_{FE}

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

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



Package Outline Dimensions (Unit: mm)



SOT-89		
Dimension	Min.	Max.
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35

Mounting Pad Layout (Unit: mm)

SOT-89

