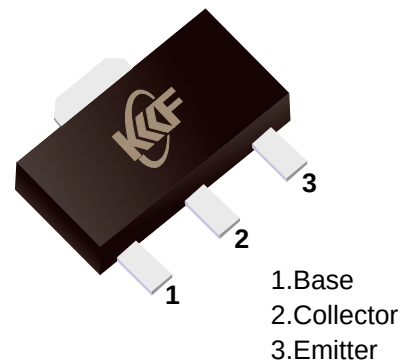


2SC2383

■ NPN Transistors

■ Features

- Excellent h_{FE} characteristics



■ Simplified outline(SOT-89)

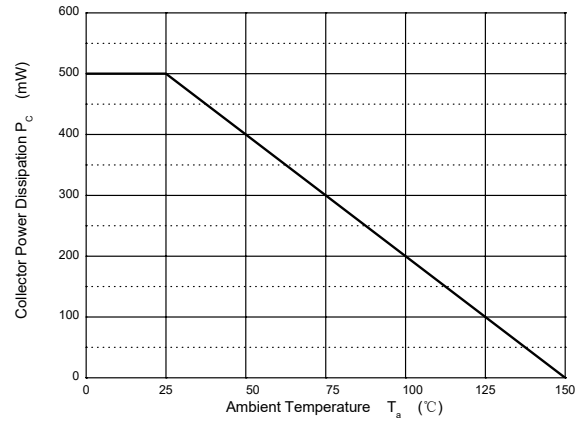
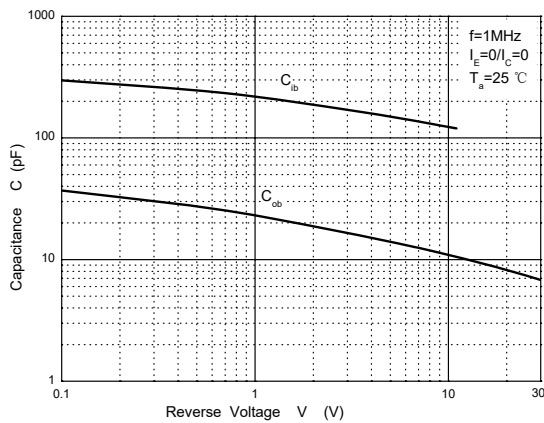
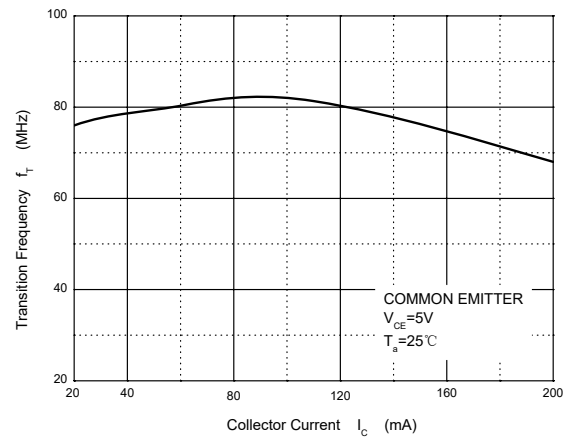
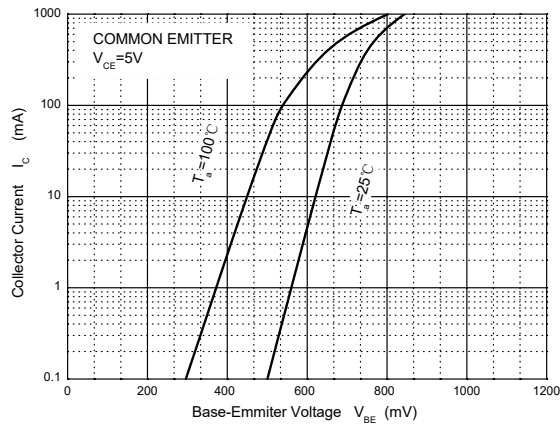
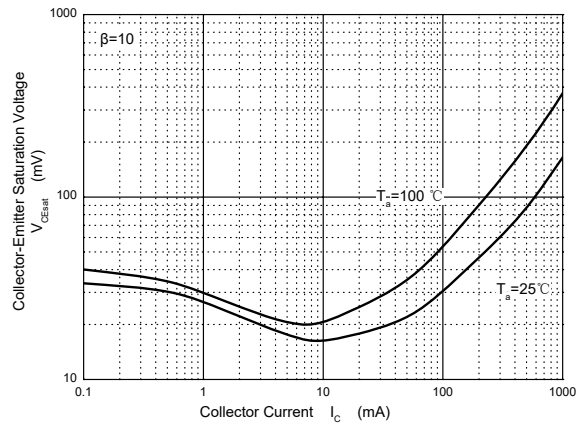
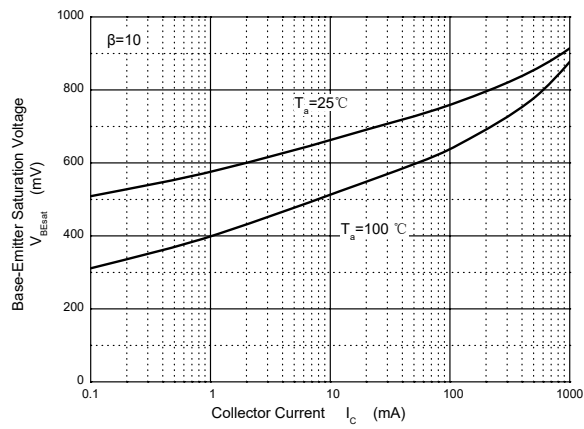
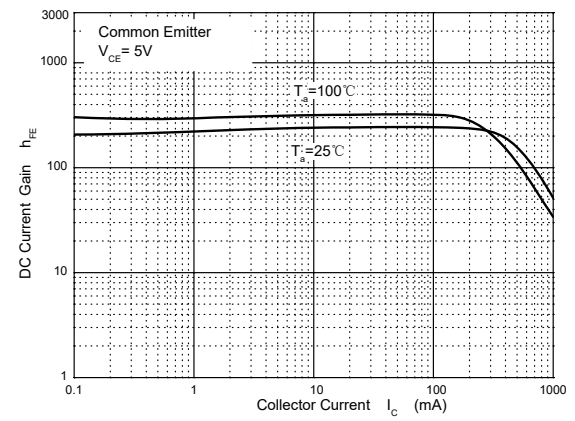
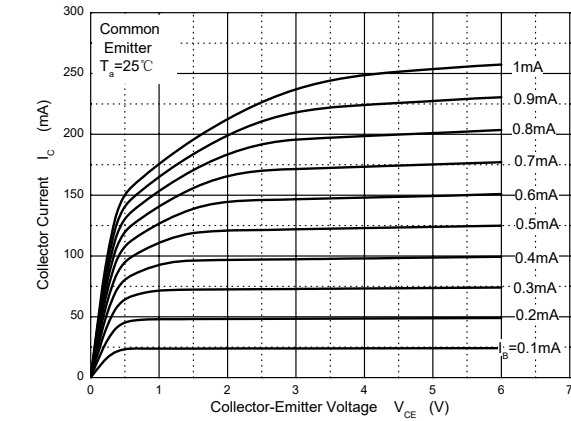
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	160	V
Collector Emitter Voltage	V_{CEO}	160	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1	A
Base Current	I_B	0.5	A
Collector Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

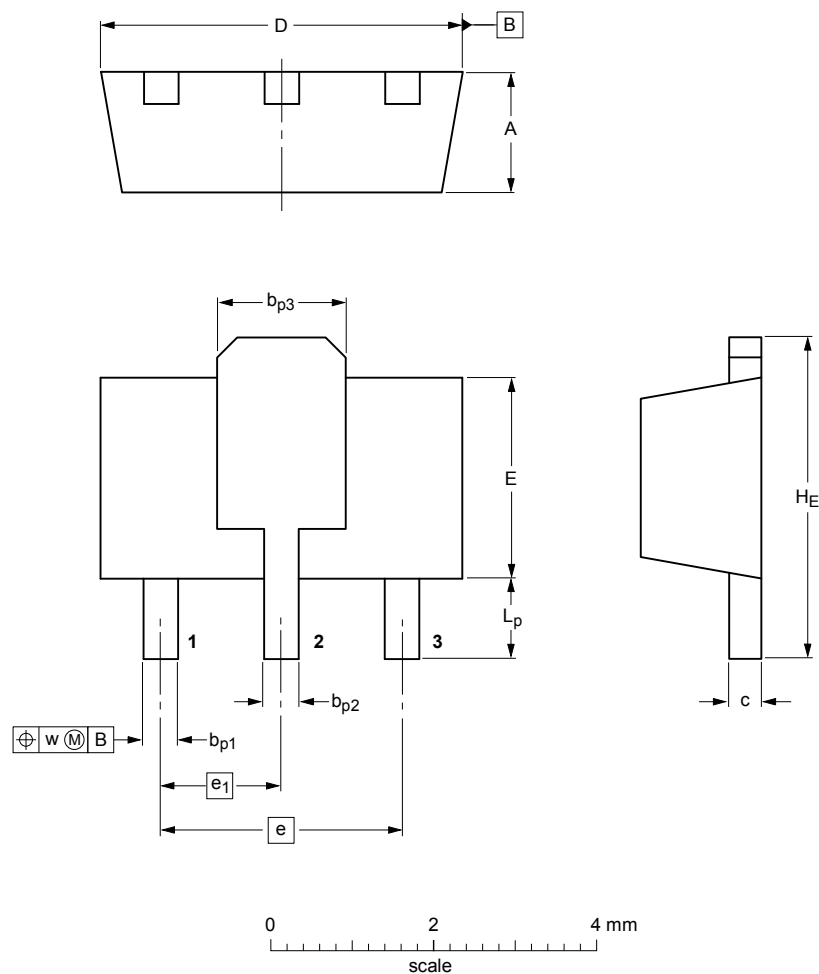
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 200\text{ mA}$ Current Gain Group O Y	h_{FE} h_{FE}	100 160	- -	200 320	- -
Collector Base Cutoff Current at $V_{CB} = 150\text{ V}$	I_{CBO}	-	-	1	μA
Emitter Base Cutoff Current at $V_{EB} = 6\text{ V}$	I_{EBO}	-	-	1	μA
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	160	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	1.5	V
Base Emitter on Voltage at $I_C = 5\text{ mA}$, $V_{CE} = 5\text{ V}$	$V_{BE(on)}$	0.45	-	0.75	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 200\text{ mA}$	f_T	20	100	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	20	pF

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■ SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	b _{p1}	b _{p2}	b _{p3}	c	D	E	e	e ₁	H _E	L _p	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13