

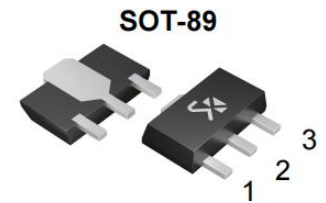


KTA1663

PNP Silicon Epitaxial Planar Transistor

Features

- High current applications
- Complementary to KTC4375



Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

1base 2collector 3emitter

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-1.5	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	-55~+150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	$^{\circ}\text{C}/\text{W}$

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Collector- base breakdown voltage	BV_{CBO}	$I_C=-1\text{mA}, I_E=0$	-30			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=-10\text{mA}, I_B=0$	-30			V
Emitter - base breakdown voltage	BV_{EBO}	$I_E=-1\text{mA}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30\text{V}, I_E=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC current gain	h_{FE}	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$	100		320	
Collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C=-1.5\text{A}, I_B=-30\text{mA}$			-2	V
Base-emitter voltage	V_{BE}	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$			-1	V
Transition frequency	f_T	$V_{CE}=-2\text{V}, I_C=-500\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			50	pF

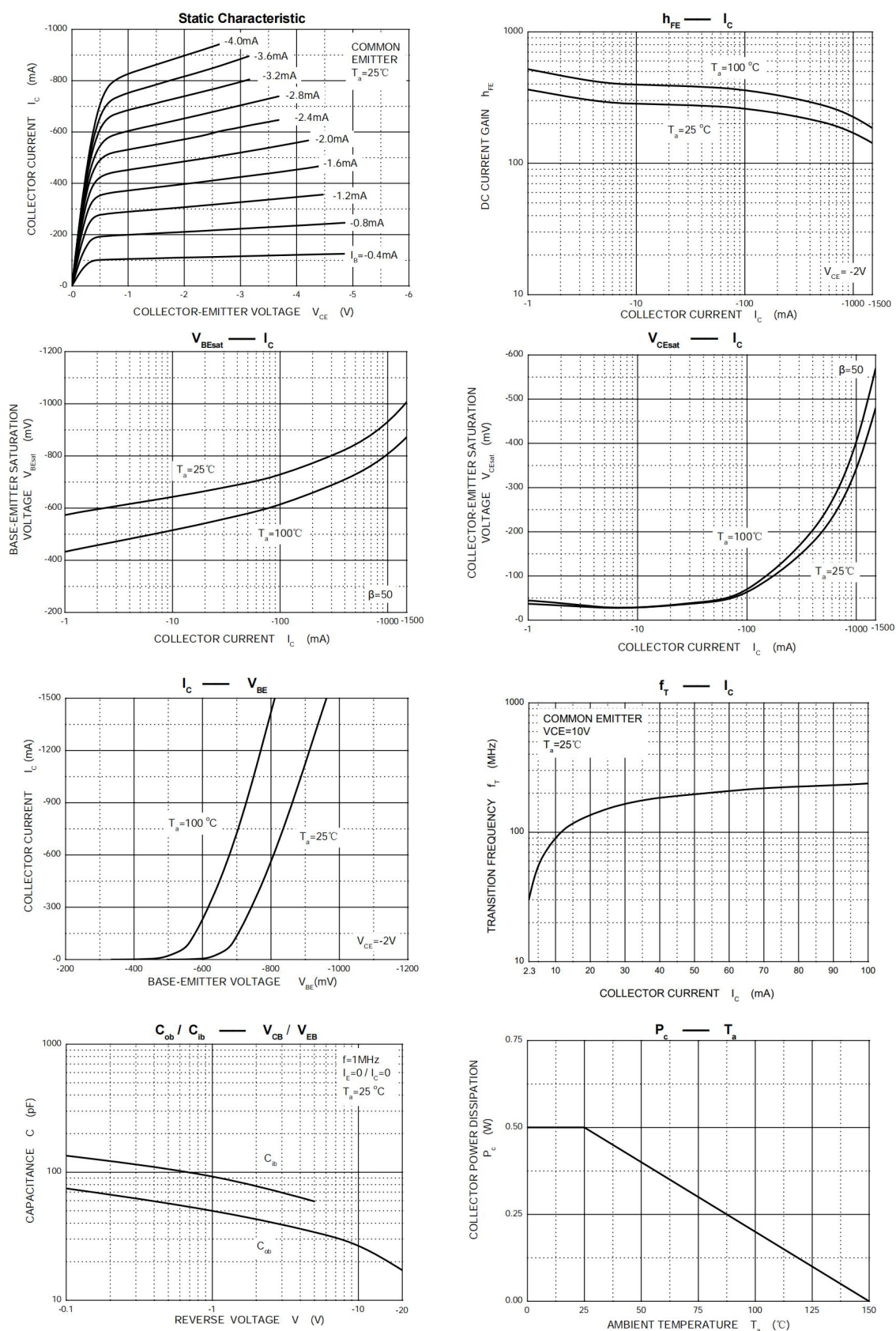
Classification Of h_{FE}

Rank	O	Y
Range	100-200	160-320
Marking	HO	HY



KTA1663

Typical Characteristic

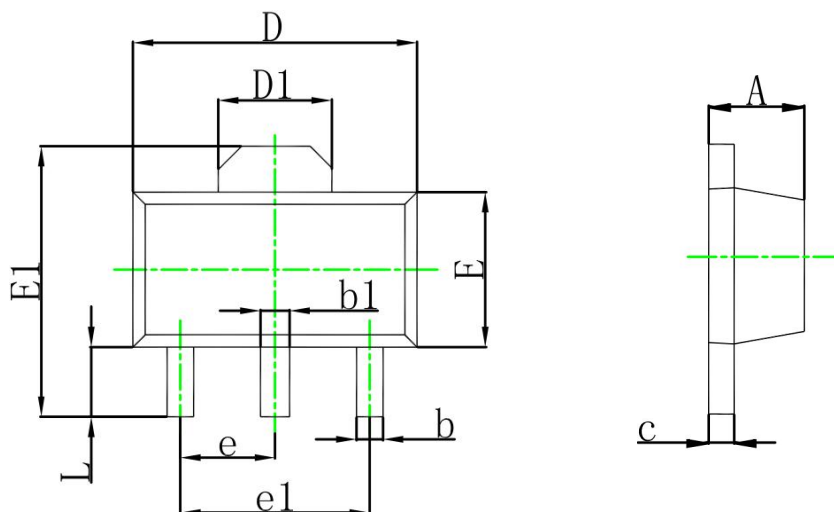




Package Information

SOT-89

Dimensions in mm



Symbol	Dimensions in millimeters		Dimensions in inches	
	Min	Max	Min	Max
A	1.350	1.650	0.053	0.065
b	0.300	0.550	0.012	0.022
b1	0.400	0.600	0.016	0.024
c	0.350	0.450	0.014	0.018
D	4.350	4.650	0.171	0.183
D1	1.700 REF.		0.067 REF	
E	2.300	2.600	0.091	0.102
E1	3.950	4.300	0.156	0.169
e	1.500 TYP		0.060 TYP	
e1	3.000 TYP		0.118 TYP	
L	0.900	1.200	0.035	0.047



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