2SA1661 TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-89

FEATURES

- Small Flat Package
- High Current Application
- High Voltage
- High Transition Frequency

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.8	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

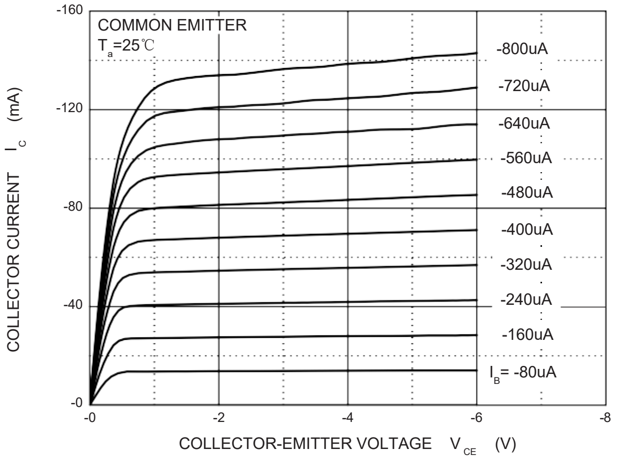
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -1mA,I_E=0	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-120V,I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-100	nA
DC current gain	h_{FE}	V_{CE}=-5V, I_C=-100mA	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA,I_B=-50mA			-1	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-500mA			-1	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz			30	pF
Transition frequency	f_T	V_{CE}=-5V,I_C=-0.1A, f=30MHz		120		MHz

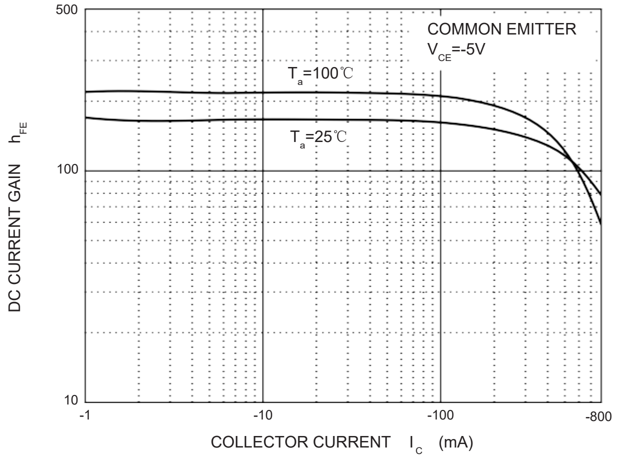
CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	80 - 160	120 - 240
MARKING	**DO.**	**DY.**

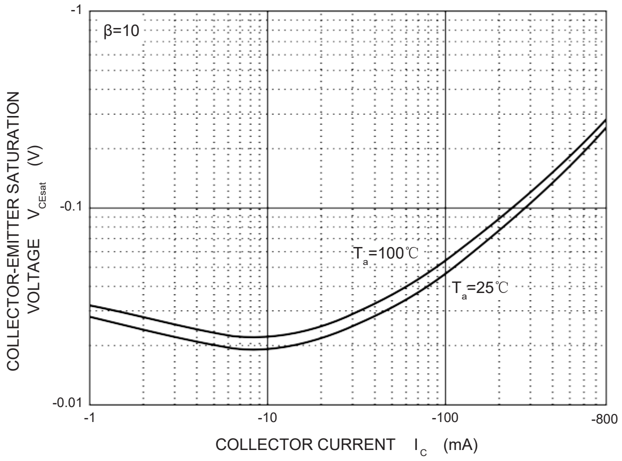
Static Characteristic



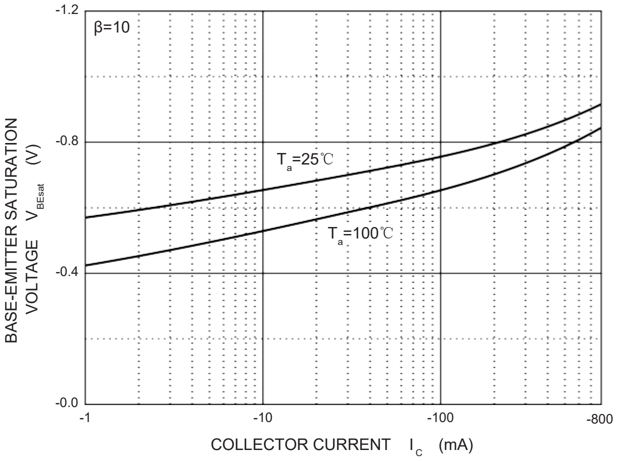
h_{FE} — I_C



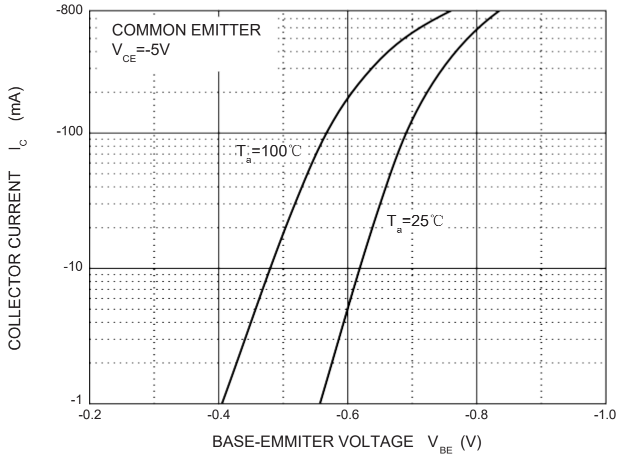
V_{CEsat} — I_C



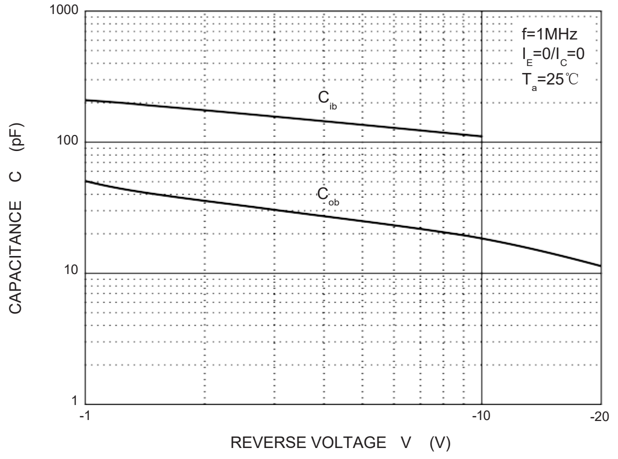
V_{BEsat} — I_C



I_C — V_{BE}



C_{ob} / C_{ib} — V_{CB} / V_{EB}



P_C — T_a