2SA1664 TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-89

FEATURES

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

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-30	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	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-35V,I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-100	nA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-100mA	100		320	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-700mA	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA,I_B=-20mA			-0.7	V
Base-emitter voltage	V_{BE}	V_{CE}=-1V, I_C=-10mA	-0.5		-0.8	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz		19		pF
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA,		120		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	100 – 200	160 – 320
MARKING	RO	RY