

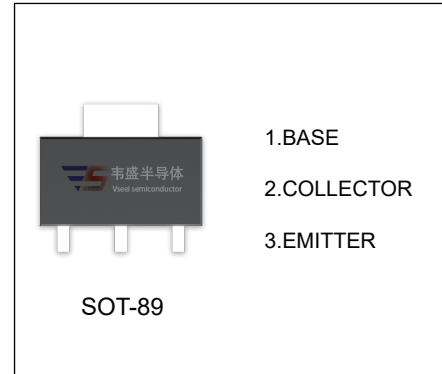
2SA1664 TRANSISTOR (PNP)

FEATURES

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

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

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

CLASSIFICATION OF $h_{FE(1)}$

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