



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

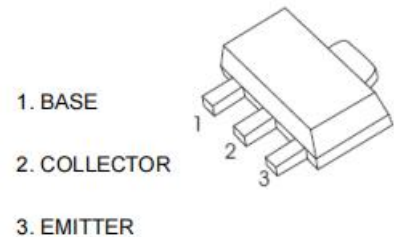
2SA1664

SOT-89 Bipolar Transistor 双极型三极管

■ Features 特点

PNP Low Voltage 低压

■ Absolute Maximum Ratings 最大额定值



Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Collector-Base Voltage 集电极基极电压	V_{CBO}	-35	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	-30	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	-5	V
Collector Current 集电极电流	I_C	-800	mA
Power dissipation 耗散功率	$P_C(T_a=25^{\circ}C)$	500	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	250	$^{\circ}C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^{\circ}C$	

■ Device Marking 产品打标

H_{FE}	100-200(O)	160-320(Y)
Mark	RO	RY

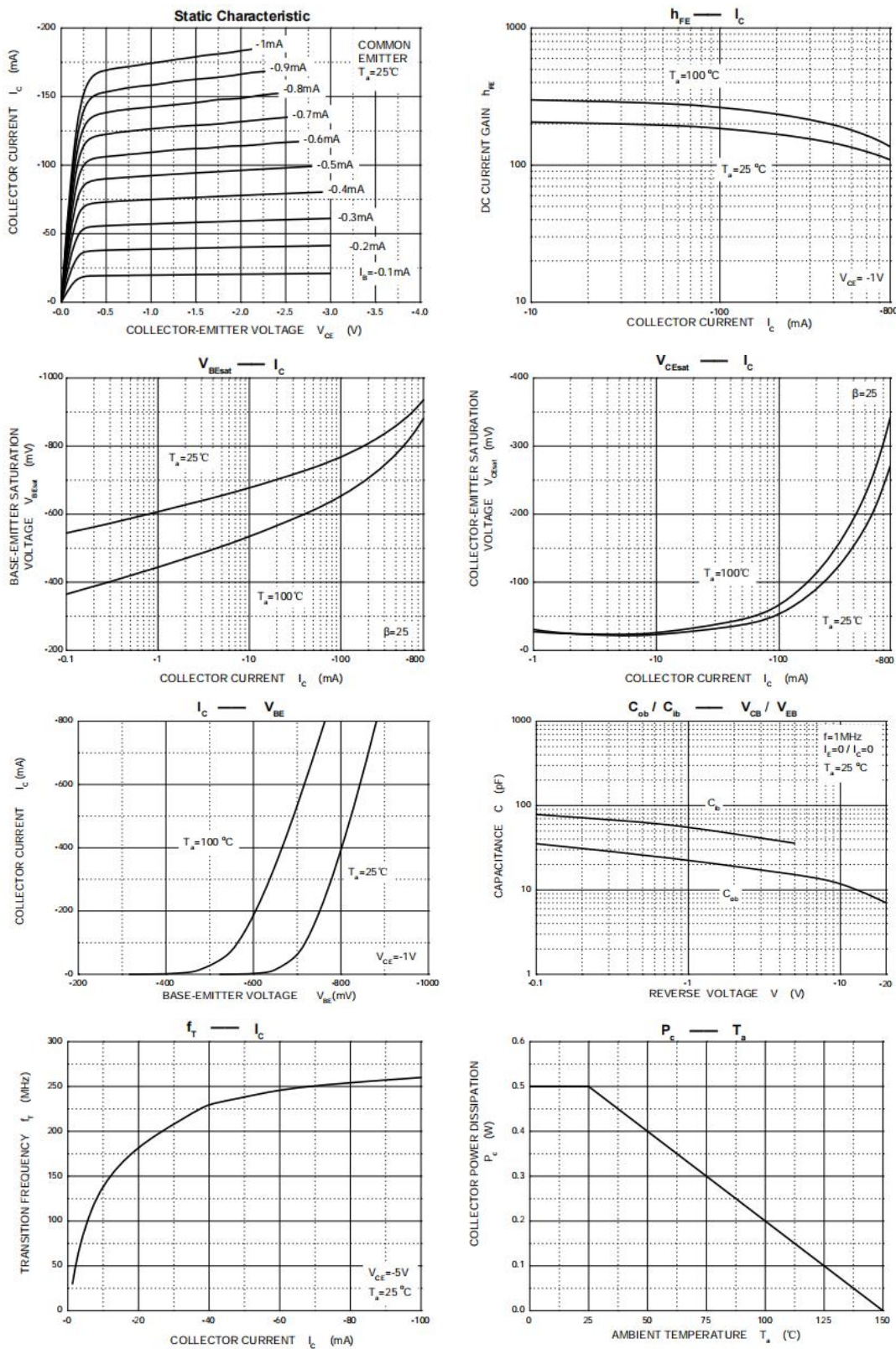


■Electrical Characteristics 电特性

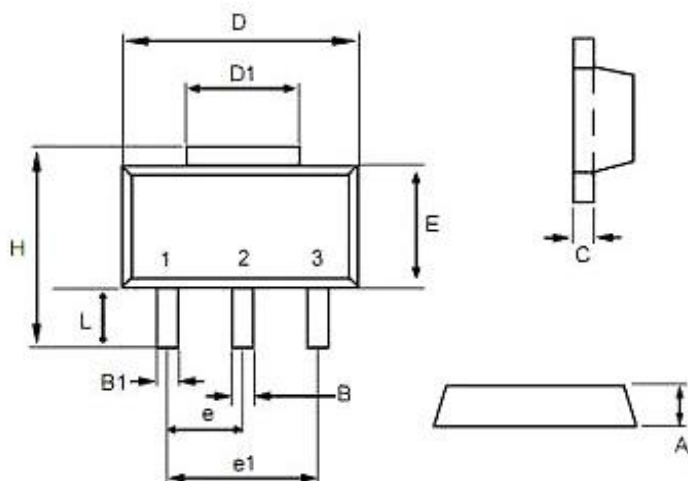
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector-Base Breakdown Voltage 集电极基极击穿电压($I_C = -1\text{mA}$, $I_E = 0$)	BV_{CBO}	-35	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压($I_C = -10\text{mA}$, $I_B = 0$)	BV_{CEO}	-30	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压($I_E = -1\text{mA}$, $I_C = 0$)	BV_{EBO}	-5	—	—	V
Collector-Base Leakage Current 集电极基极漏电流($V_{CB} = -35\text{V}$, $I_E = 0$)	I_{CBO}	—	—	-100	nA
Emitter-Base Leakage Current 发射极基极漏电流($V_{EB} = -5\text{V}$, $I_C = 0$)	I_{EBO}	—	—	-100	nA
DC Current Gain($V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$) 直流电流增益($V_{CE} = -1\text{V}$, $I_C = -700\text{mA}$)	H_{FE}	100 35	—	320	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降($I_C = -500\text{mA}$, $I_B = -20\text{mA}$)	$V_{CE(sat)}$	—	—	-0.7	V
Base-Emitter Saturation Voltage 基极发射极饱和压降($I_C = -500\text{mA}$, $I_B = -20\text{mA}$)	$V_{BE(sat)}$	—	—	-1.2	V
Base-Emitter On Voltage 基极发射极导通电压($V_{CE} = -1\text{V}$, $I_C = -10\text{mA}$)	$V_{BE(on)}$	—	—	-1.2	V
Transition Frequency 特征频率($V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$)	f_T	—	120	—	MHz
Output Capacitance 输出电容($V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$)	C_{ob}	—	19	—	pF

Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Dim	min	max
A	1.40	1.60
B	0.40	0.56
B1	0.35	0.48
C	0.35	0.44
D	4.40	4.60
D1	1.35	1.83
e	1.50 BSC	
e1	3.00 BSC	
E	2.29	2.60
H	3.75	4.25
L	0.80	1.20