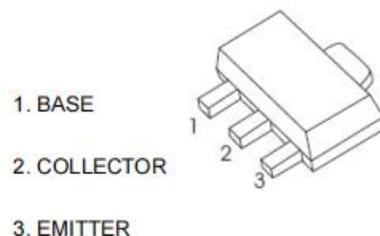


**SOT-89 Bipolar Transistor 双极型三极管**

■ **Features 特点**

**NPN Low Saturation Voltage 低饱和压降**



■ **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	$V_{CBO}$	60	V
Collector-Emitter Voltage 集电极发射极电压	$V_{CEO}$	50	V
Emitter-Base Voltage 发射极基极电压	$V_{EBO}$	6	V
Collector Current 集电极电流	$I_C$	2000	mA
Power dissipation 耗散功率	$P_C(T_a=25^\circ\text{C})$	500	mW
Thermal Resistance Junction-Ambient 热阻	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	$T_J, T_{stg}$	-55to+150 $^\circ\text{C}$	

■ **Device Marking 产品打标**

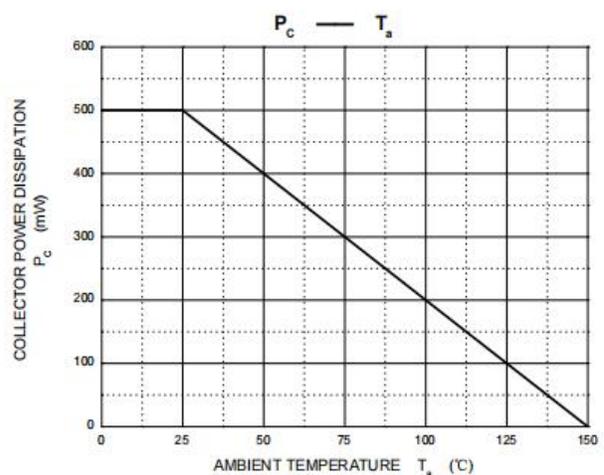
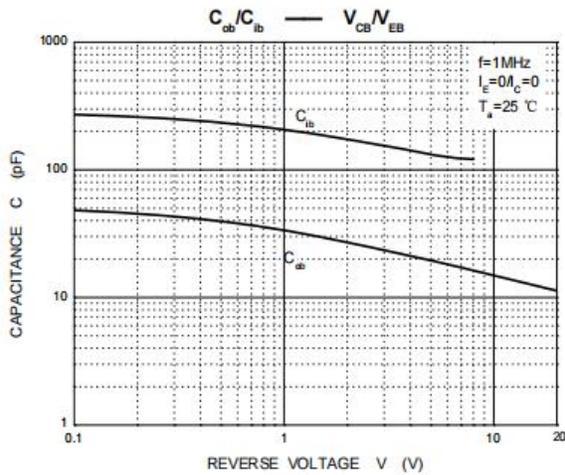
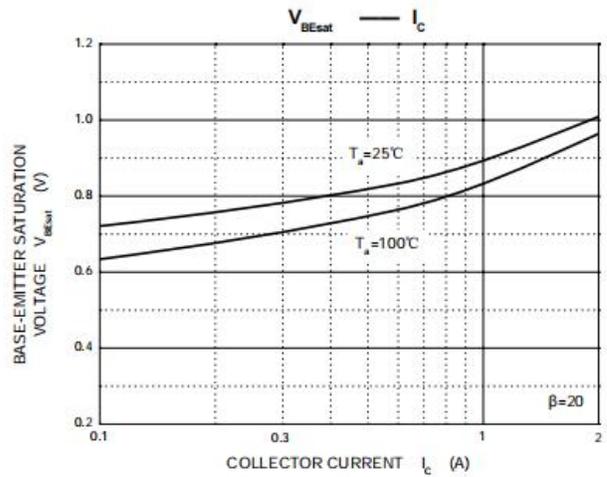
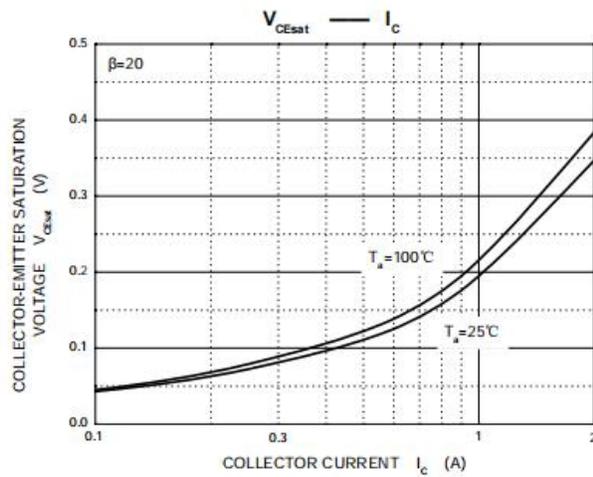
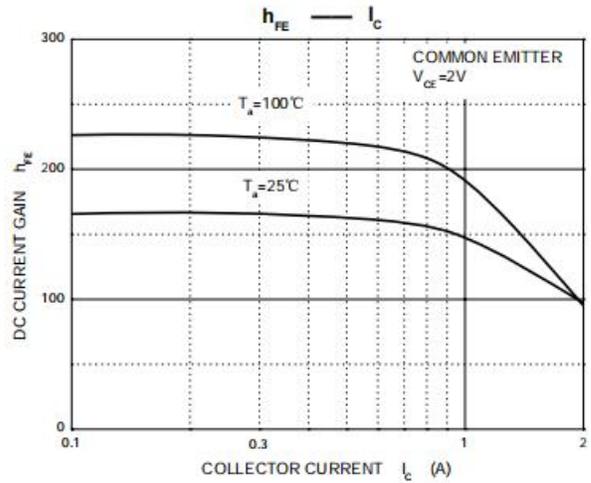
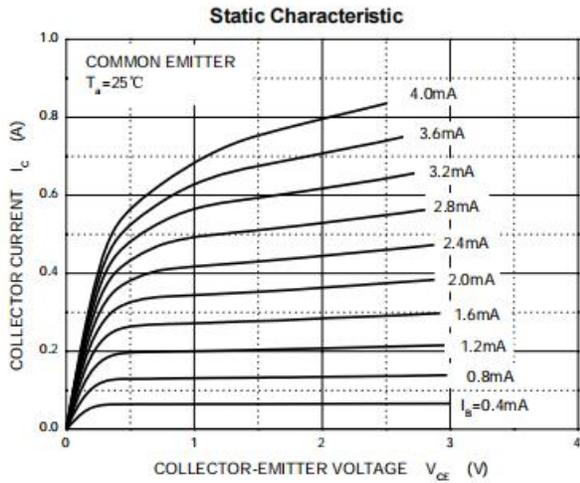
$H_{FE}$	82-180(P)	120-270(Q)	180-390(R)
Mark	DKP	DKQ	DKR

**■Electrical Characteristics 电特性**

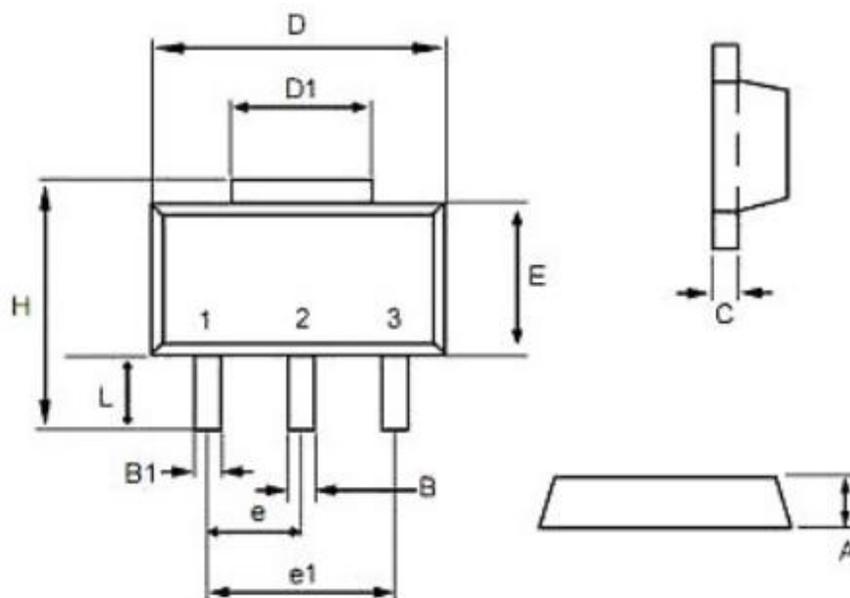
(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

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 (IC= 50μA, IE=0)	BV <sub>CBO</sub>	60	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压 (IC= 1mA, IB=0)	BV <sub>CEO</sub>	50	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压 (IE= 50μA, IC=0)	BV <sub>EBO</sub>	6	—	—	V
Collector-Base Leakage Current 集电极基极漏电流 (V <sub>CB</sub> = 60V, IE=0)	I <sub>CBO</sub>	—	—	100	nA
Emitter-Base Leakage Current 发射极基极漏电流 (V <sub>EB</sub> = 5V, IC=0)	I <sub>EBO</sub>	—	—	100	nA
DC Current Gain 直流电流增益 (V <sub>CE</sub> = 2V, IC= 500mA)	H <sub>FE</sub>	82	—	390	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降 (IC= 1000mA, IB= 50mA)	V <sub>CE(sat)</sub>	—	—	350	mV
Base-Emitter Saturation Voltage 基极发射极饱和压降 (IC= 1000mA, IB= 50mA)	V <sub>BE(sat)</sub>	—	—	1000	mV
Transition Frequency 特征频率 (V <sub>CE</sub> = 2V, IC= 500mA)	f <sub>T</sub>	—	210	—	MHz
Output Capacitance 输出电容 (V <sub>CB</sub> = 10V, IE=0, f=1MHz)	C <sub>ob</sub>	—	25	—	pF

■ Typical Characteristic Curve 典型特性曲线



■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.40	1.60	0.055	0.063
B	0.40	0.56	0.016	0.022
B1	0.35	0.48	0.014	0.019
C	0.35	0.44	0.014	0.017
D	4.40	4.60	0.173	0.181
D1	1.35	1.83	0.053	0.072
e	1.45	1.55	0.057	0.061
e1	2.95	3.05	0.116	0.120
E	2.29	2.60	0.090	0.102
H	3.75	4.25	0.148	0.167
L	0.80	1.20	0.031	0.047