

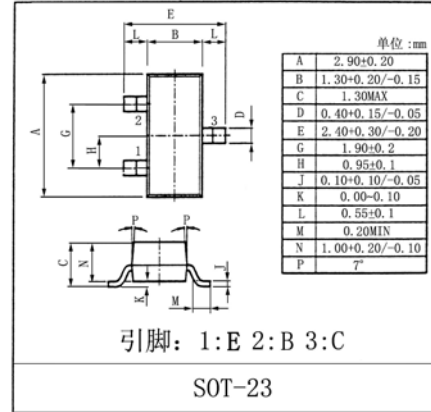
用途:用于音频放大输出,电压调节器,电源转换和继电器驱动。

Purpose: Output stage of audio amplifier, voltage regulator, DC-DC converter and relay driver.

特点:饱和压降小, h_{FE} 高且线性好/Features: Low saturation voltage, excellent h_{FE} linearity and high h_{FE} .

极限参数/Absolute maximum ratings ($T_a=25^\circ\text{C}$)

参数符号 Symbol	数值 Rating	单位 Unit
V_{CB0}	-40	V
V_{CE0}	-30	V
V_{EB0}	-5	V
I_C	-3	A
I_{CP}	-7	A
P_C	0.35	W
T_j	150	$^\circ\text{C}$
T_{stg}	-55~150	$^\circ\text{C}$



电性能参数/Electrical characteristics ($T_a=25^\circ\text{C}$)

参数符号 Symbol	测试条件 Test condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
BV_{CB0}	$I_C=-100\mu\text{A}$	$I_E=0$	-40			V
BV_{CE0}	$I_C=-1\text{mA}$	$I_B=0$	-30			V
BV_{EB0}	$I_E=-100\mu\text{A}$	$I_C=0$	-5			V
I_{CB0}	$V_{CB}=-30\text{V}$	$I_E=0$			-1	μA
I_{CE0}	$V_{CE}=-30\text{V}$	$I_B=0$			-1	μA
I_{EB0}	$V_{EB}=-3\text{V}$	$I_C=0$			-1	μA
$*h_{FE(1)}$	$V_{CE}=-2\text{V}$	$I_C=-1\text{A}$	100	150	400	
$h_{FE(2)}$	$V_{CE}=-2\text{V}$	$I_C=-20\text{mA}$	30	200		
$V_{CE(sat)}$	$I_C=-2\text{A}$	$I_B=-0.2\text{A}$		-0.3	-0.5	V
$V_{BE(sat)}$	$I_C=-2\text{A}$	$I_B=-0.2\text{A}$		-1	-2	V
f_T	$V_{CE}=-5\text{V}$	$I_C=-0.1\text{A}$		80		MHz
C_{ob}	$V_{CB}=-10\text{V}$	$I_E=0$	$f=1\text{MHz}$	45		pF

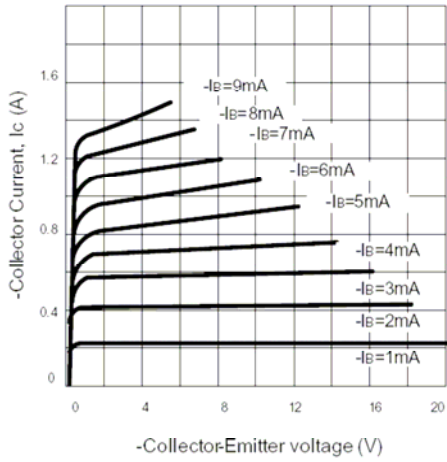
*脉冲测试: 脉宽 $\leq 300\mu\text{S}$, 占空比 $\leq 2.0\%$ /pulse test: pulse width $\leq 300\mu\text{S}$, duty cycle $\leq 2.0\%$.

$h_{FE(1)}$ 分档 $h_{FE(1)}$ Classifications	Q	P	E
$h_{FE(1)}$ 范围 $h_{FE(1)}$ Range	100-200	160-320	200-400
印章 Marking	H72Q	H72P	H72E

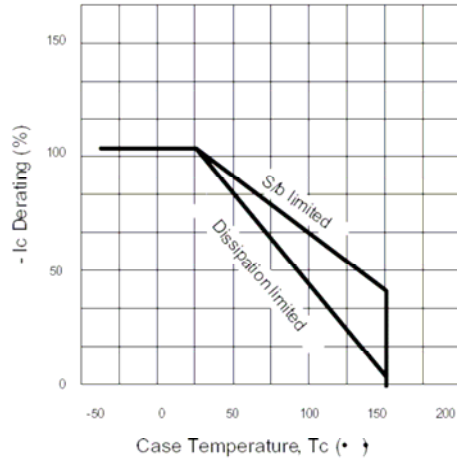


2SB772M (3CA772M)

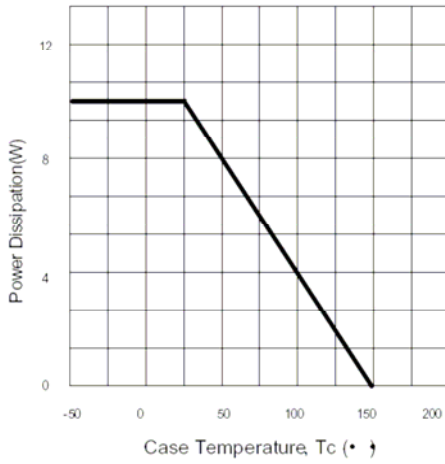
Static Characteristics



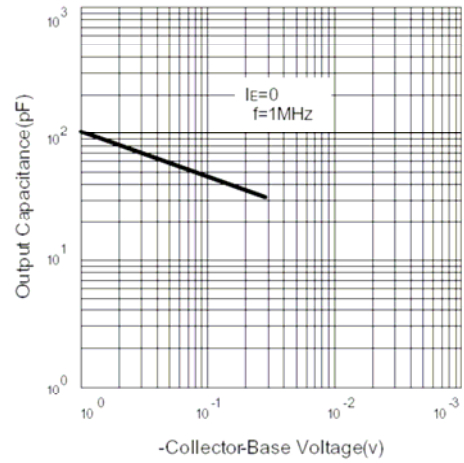
Derating Curve of Safe Operating Areas



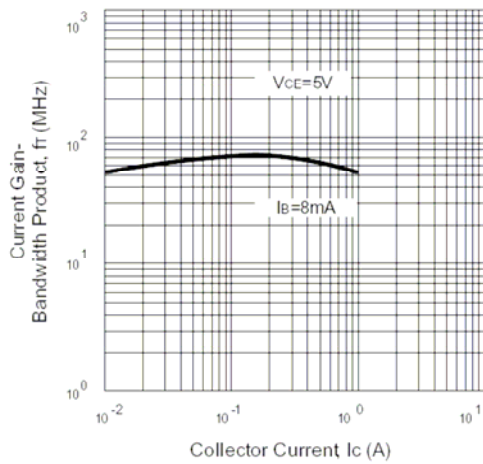
Power Derating



Collector Output Capacitance



Current Gain - Bandwidth Product



Safe Operating Area

