2SC5198 2SA1941

用途

- 音频产品
  - ♦ 家用放大器
  - ♦ 家庭接收器
  - ♦汽车音频放大器

APPLICATIONS

- Audio Products
  - ♦ Home Amplifiers
  - ♦ Home Receivers
  - ♦ Auto Audio Amplifiers

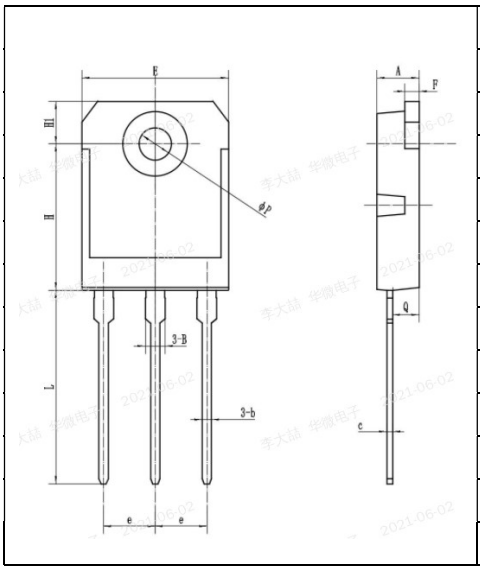
产品特性

- 高集电极电压：VCEO=140V (min)
- NPN-PNP 互补
- 大电流输入输出能力：Ic=15A
- 优秀的线性增益
- 宽安全工作区
- 环保（RoHS）产品

FEATURES

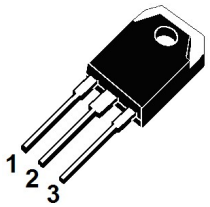
- High collector voltage：VCEO=140V (min)
- Complementary NPN-PNP
- High current capability：Ic=15A
- Excellent gain linearity
- Exceptional Safe Operating Area
- RoHS Devices

封装 Package



符号	尺寸（mm）
A	4.35-4.75
B	1.80-2.20
b	0.80-1.20
c	0.50-0.70
E	15.30-15.70
e	5.25-5.65
F	1.40-1.60
H	15.3-15.7
H1	4.30-4.70
L	20.00-21.00
P	3.10-3.60
Q	2.60-3.00

TO-3PT



1. 基极 BASE
2. 集电极（热沉）COLLECTOR (HEAT SINK)
3. 发射极 EMITTER

订货信息 ORDER MESSAGE

订 货 型 号 Order codes		印 记 Marking	封 装 Package
有卤-条管 Halogen-Tube	有卤-盒装 Halogen-Reel		
2SC5198-G1-B	N/A	2SC5198	TO-3PT
2SA1941-G1-B	N/A	2SA1941	TO-3PT

绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃ unless otherwise noted)

项 目 Parameter		符 号 Symbol	数 值 Value	单 位 Unit
集电极—基极直流电压	Collector- Base Voltage	V_{CBO}	140	V
集电极—发射极直流电压	Collector- Emitter Voltage	V_{CEO}	140	V
发射极—基极直流电压	Emitter-Base Voltage	V_{EBO}	5	V
最大集电极电流	Collector Current	I_C	15	A
最大基极电流	Base Current	I_B	1.5	A
耗散功率	Total Power Dissipation(Tc=25℃)	P_D	130	W
最高结温	Junction Temperature	T_j	150	℃
贮存温度	Storage Temperature	T_{stg}	-55~150	℃

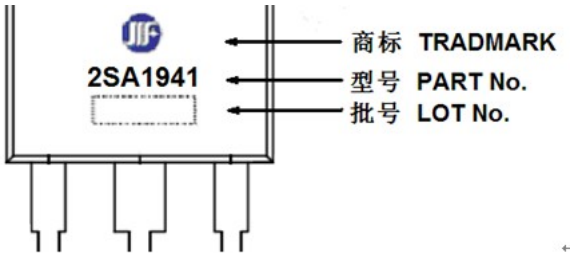
电特性 ELECTRICAL CHARACTERISTIC

项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单位 Unit
I_{CBO}	V_{CB}=140V,I_E=0		-	-	5.0	μA
I_{EBO}	V_{EB}=5V,I_C=0		-	-	5.0	mA
$V_{(BR)CEO}$	Ic=50mA,I_B=0		140	-	-	V
hFE	V_{CE}=5V,I_C=1.0A		80	-	160	-
	V_{CE}=5V,I_C=5.0A		35	-	-	-
$V_{CE(sat)}$	I_C=7.0A,I_B=0.7A		-	-	2.0	V
$V_{BE(ON)}$	V_{CE}=5V,I_C=5.0A		-	-	1.5	V
f_T	V_{CE}=5V, Ic=1.0A		-	30	-	MHz
C_{Ob}	V_{CE}=10V,	2SC5198	-	170	-	pF
	I_E =0,f=1MHz	2SA1941	-	320	-	

热特性 THERMAL CHARACTERISTIC

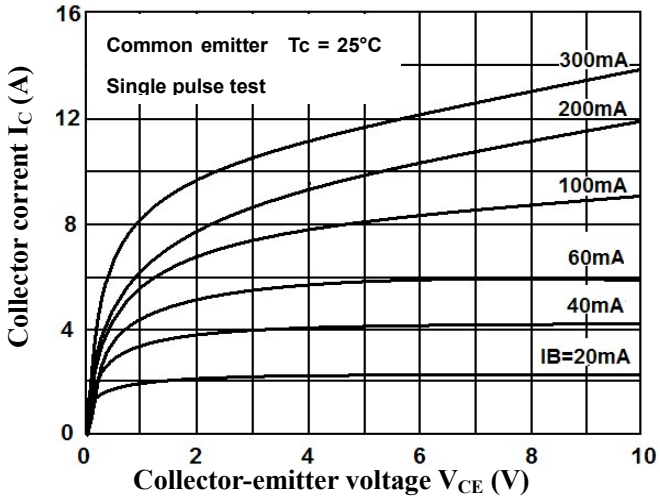
项 目 Parameter	符 号 Symbo	最小值 min	最大值 max	单 位 Unit
结到管壳的热阻 Thermal Resistance Junction Case	$R_{th(j-c)}$	-	0.962	℃/W

印记说明 MARKING

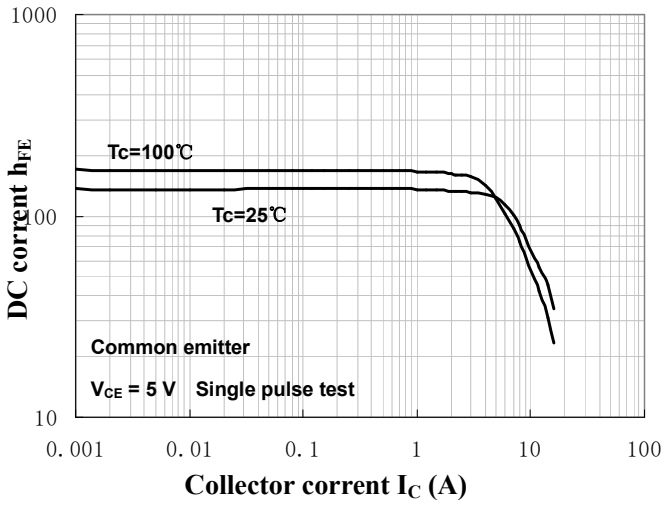


特征曲线 ELECTRICAL CHARACTERISTICS (curves)—2SC5198

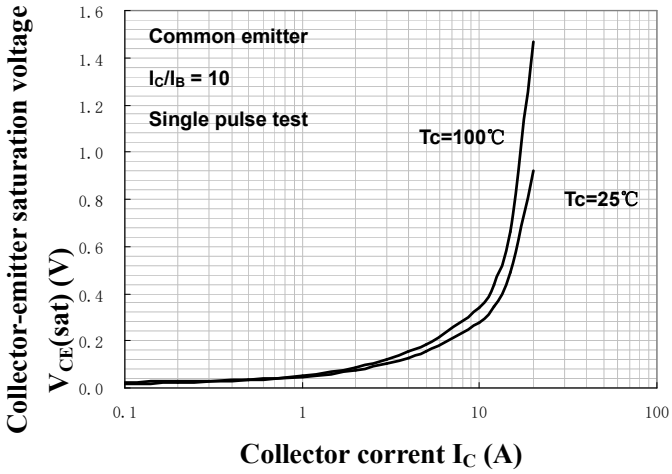
I_C-V_{CE}



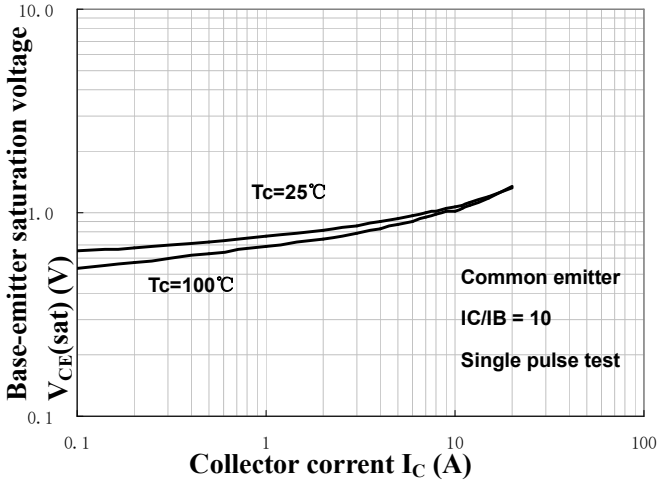
hFE – I_C



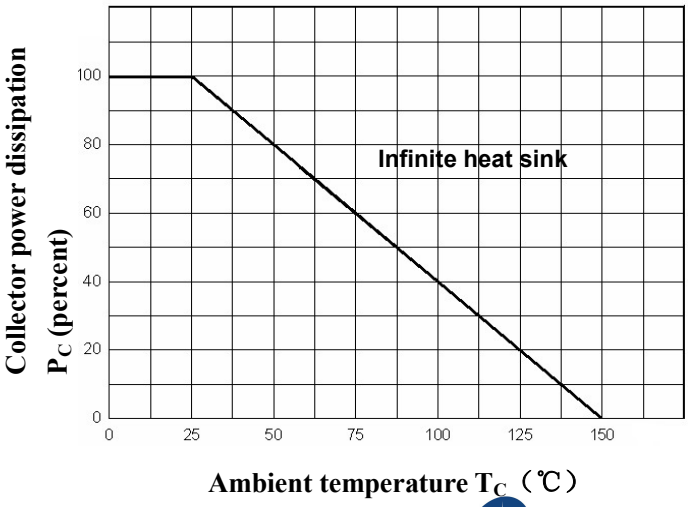
$V_{CE(sat)}$- I_C



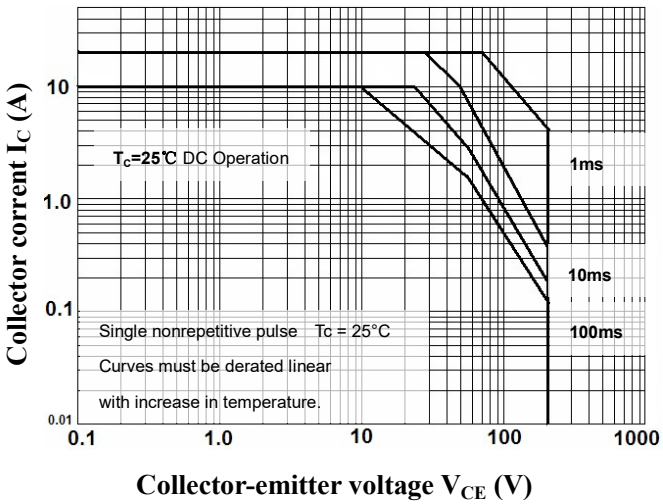
$V_{BE(sat)}$- I_C



P_C-T_C

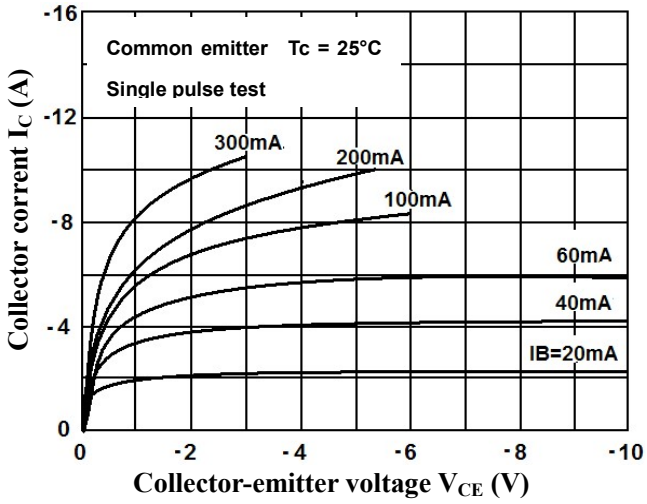


SOA

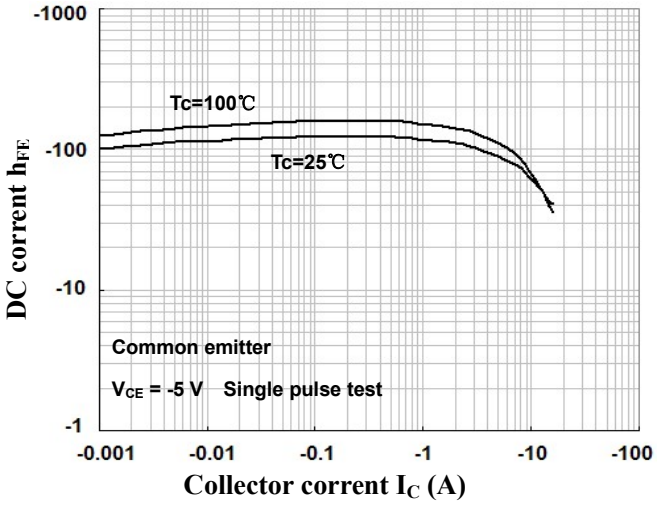


特征曲线 ELECTRICAL CHARACTERISTICS (curves)—2SA1941

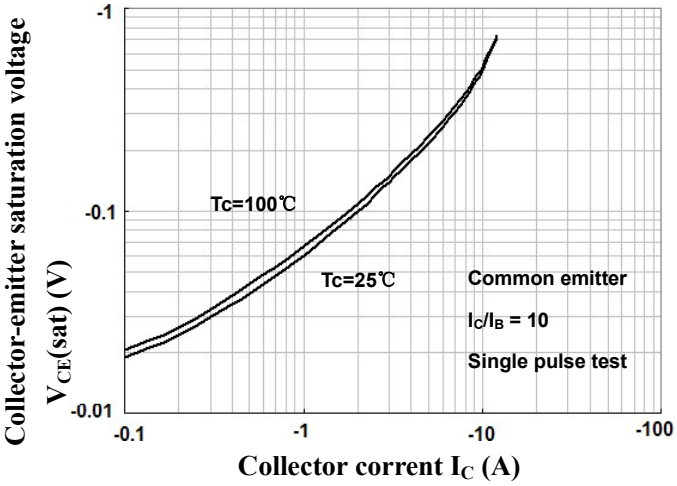
I_C-V_{CE}



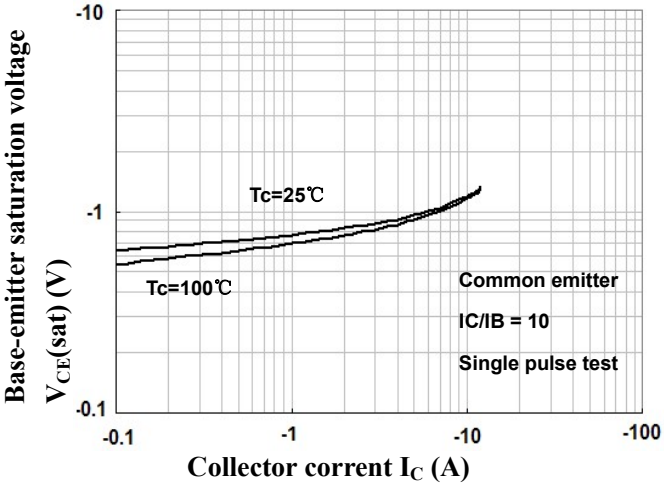
hFE – I_C



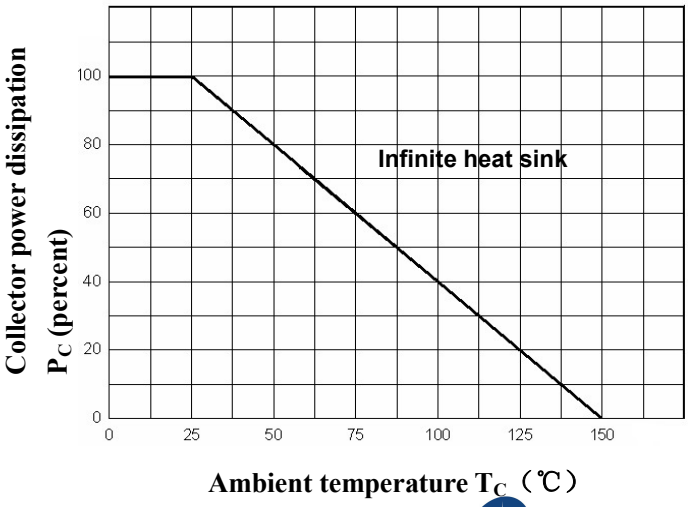
$V_{CE(sat)}$- I_C



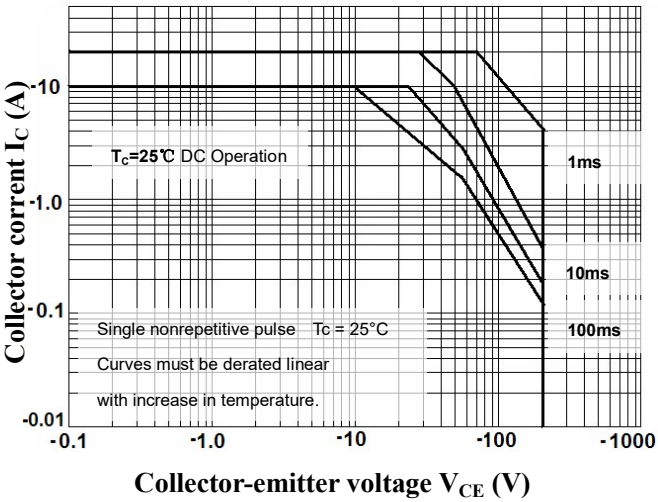
$V_{BE(sat)}$- I_C



P_C-T_C



SOA



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