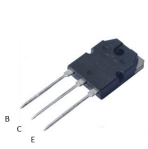
NPN 型硅功率晶体管 2SC3856

1. 极限值

除非另有规定，Tc=25℃

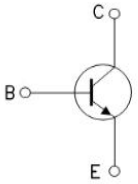
参 数 名 称	符 号	额 定 值	单 位
集电极-发射极电压	V_{CEO}	180	V
集电极-基 极电压	V_{CBO}	200	V
发射极-基 极电压	V_{EBO}	6	V
集电极电流	Ic	15	A
集电极耗散功率	Ptot	130	W
最高结温	Tj	150	℃
贮存温度	Tstg	-55-150	℃



TO-3PXK

TO-3PN

内部等效原理图



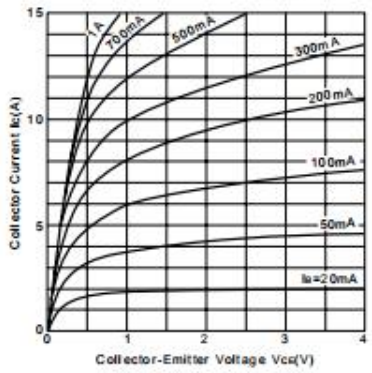
2. 电参数

除非另有规定，Tc=25℃

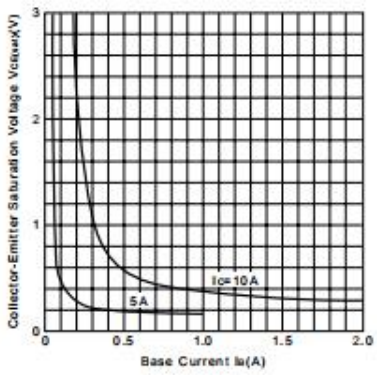
参 数 名 称	符 号	测试条件	规 范 值			单 位
			最小	典型	最大	
集电极-基极截止电流	I_{CBO}	V_{CB}= 200 V			100	μA
发射极-基极截止电流	I_{EBO}	V_{EB}=6 V			100	μA
集电极-基极击穿电压	V_{CBO}	I_C= 1mA	200			V
集电极-发射极击穿电压	V_{CEO}	I_C= 1mA	180			V
发射极-基极击穿电压	V_{EBO}	I_B= 1mA	6			V
直流电流增益	h_{FE}	I_C= 3A,V_{CE}= 4V	50			
集电极-发射极饱和电压	$V_{CE\ sat}$	I_C= 5A,I_B= 0.5 A			2.0	V
基 极-发射极饱和电压	f_T	I_E= -0.5A,V_{CE}= 12V		20		MHz

3. 特性曲线

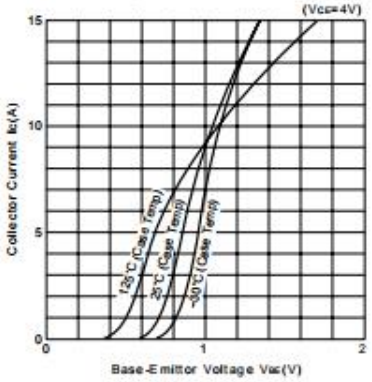
I_C–V_{CE} Characteristics (Typical)



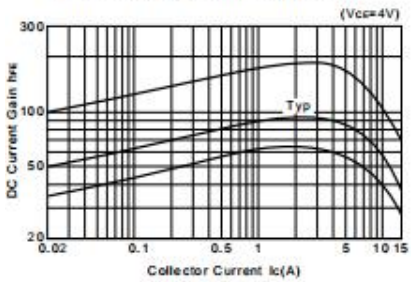
V_{CE}(sat)–I_B Characteristics (Typical)



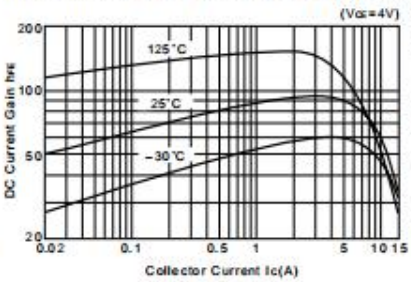
I_C–V_{BE} Temperature Characteristics (Typical)



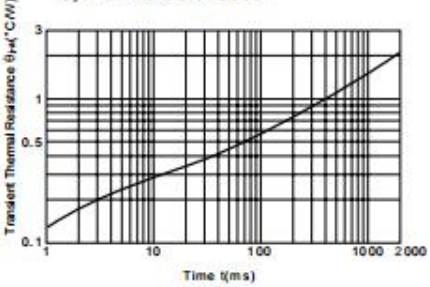
h_{FE}–I_C Characteristics (Typical)



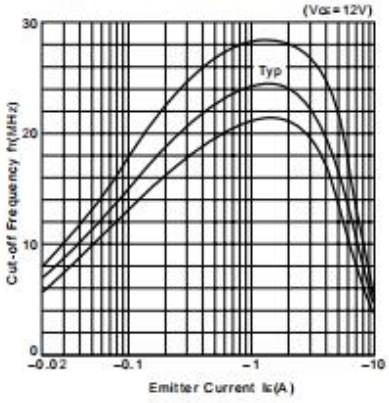
h_{FE}–I_C Temperature Characteristics (Typical)



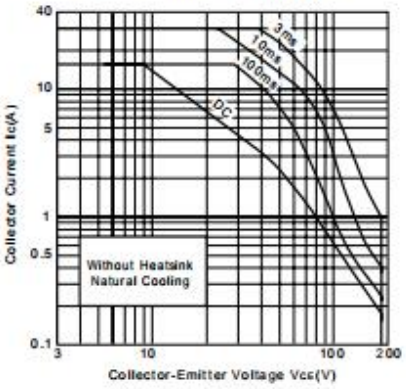
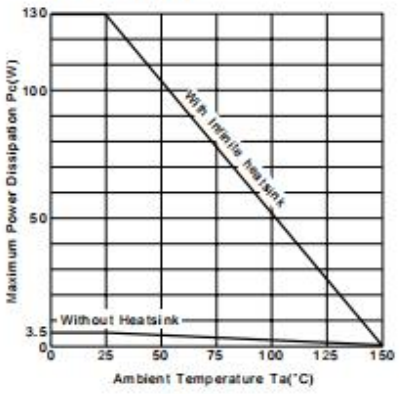
θ_{j-a}–t Characteristics



f_T–I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc–Ta Derating