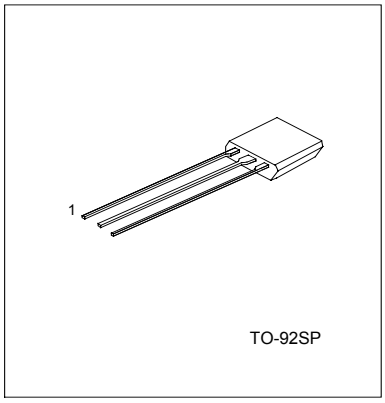
UTC 2SC5765 NPN EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER AMPLIFIER
STROBO FLASH



1.EMITTER 2.COLLECTOR 3.BASE

DESCRIPTION
* medium power amplifier applications

* strobo flash applications

FEATURES
*Low Saturation Voltage: V_{CE}(sat) = 0.27 V (max.),
(I_C = 3A / I_B =60 mA)

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	15	V
Collector-Emitter Voltage	V_{CEO}	10	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	Ic	5(DC)	A
		9(PLUSED)	A
Collector Power Dissipation	Pc(Note 1)	550	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Note 1: When a device is mounted on a glass epoxy board (35 mm*30 mm*1mm)

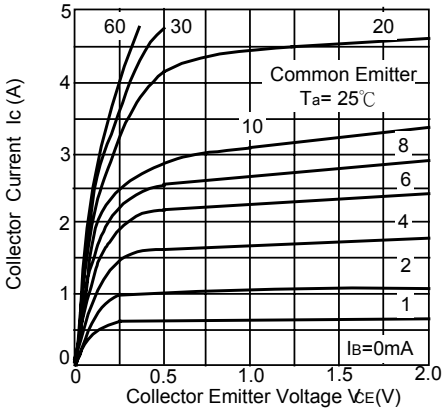
ELECTRICAL CHARACTERISTICS (Ta=25°C,unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C =1mA, I_B= 0	10			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=15V, I_E= 0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= 5V, Ic=0			0.1	μA
DC Current Gain	$h_{FE\ 1}$ (Note 2)	V_{CE}=1.5V,Ic=0.5A	450		700	
	h_{FE2} (Note 2)	V_{CE}=1.5V,Ic=2A	320			
	h_{FE3} (Note 2)	V_{CE}=1.5V,Ic=5A	170			
Collector-Emitter Saturation Voltage	V_{CE}(sat) (note 2)	Ic=3A,I_B=60mA			0.27	V
Collector Output Capacitance	Cob	V_{CB}=10V, I_E= 0, f=1MHz		25		pF

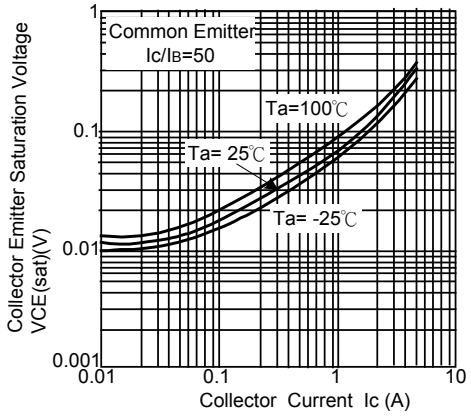
Note 2: Pulse test

ELECTRICAL CHARACTERISTICS CURVES

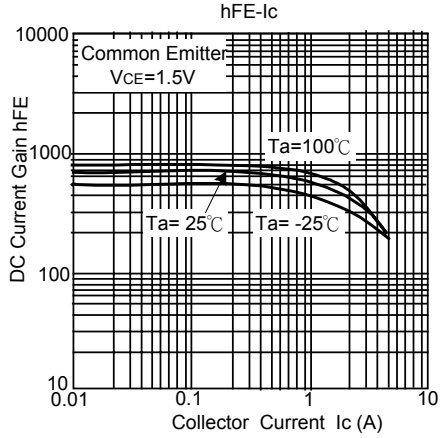
Ic-V_{CE}



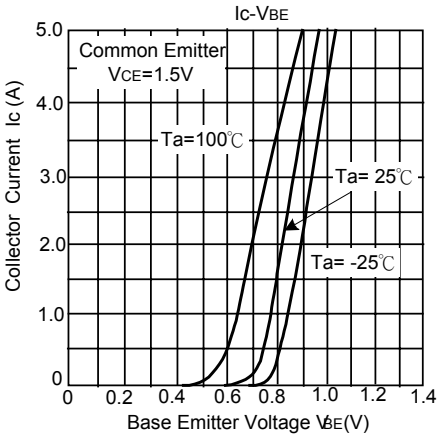
$V_{CE(sat)}$-Ic



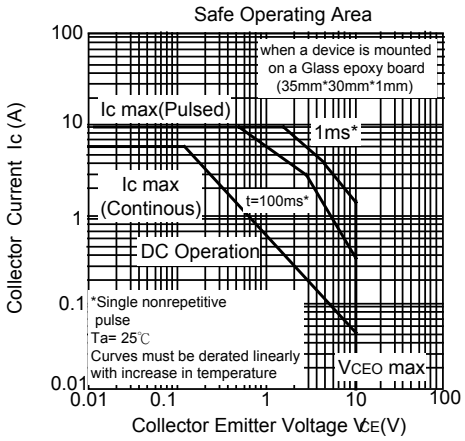
hFE-Ic



Ic-V_{BE}



Safe Operating Area



Pc-Ta