

# UTC2SC5765

# NPN EPITAXIAL SILICON TRANSISTOR

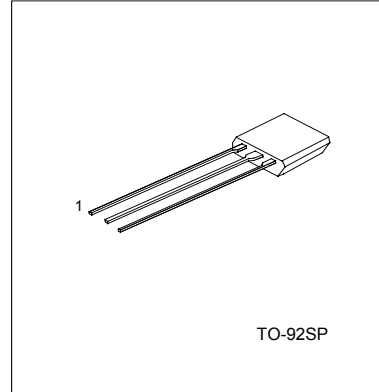
## MEDIUM POWER AMPLIFIER STROBO FLASH

### DESCRIPTION

- \* medium power amplifier applications
- \* strobo flash applications

### FEATURES

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



1.EMITTER 2.COLLECTOR 3.BASE

### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

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	$I_c$	5(DC)	A
		9(PULSED)	A
Collector Power Dissipation	$P_c$ (Note 1)	550	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

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

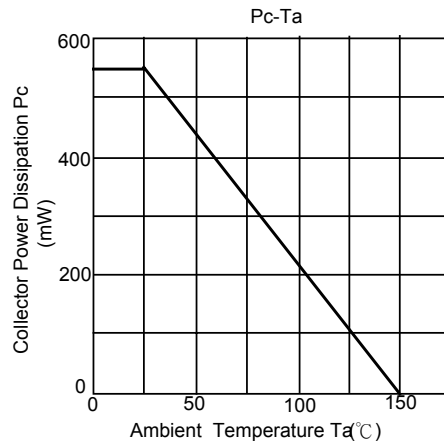
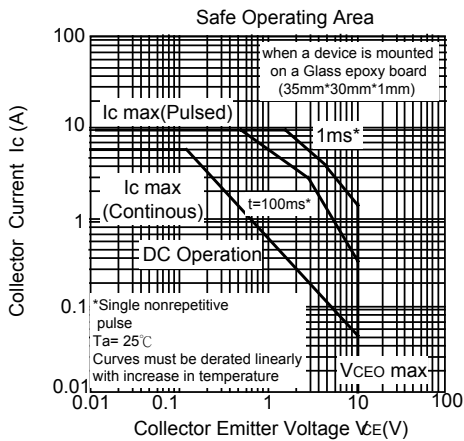
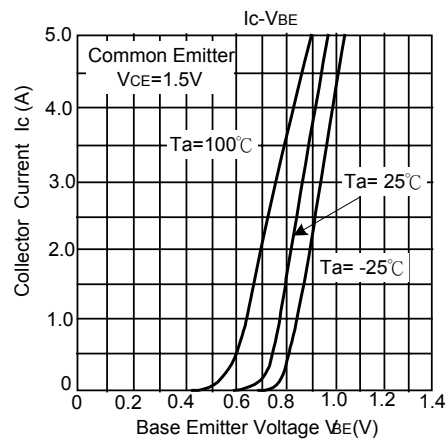
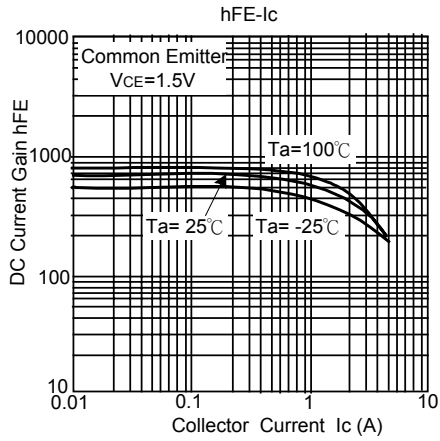
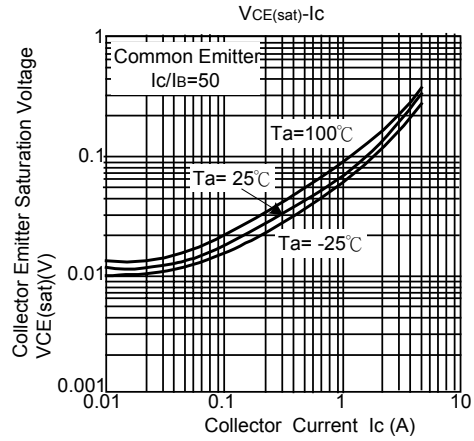
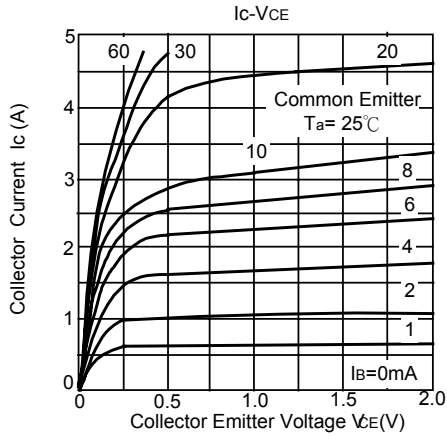
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ , unless otherwise specified )

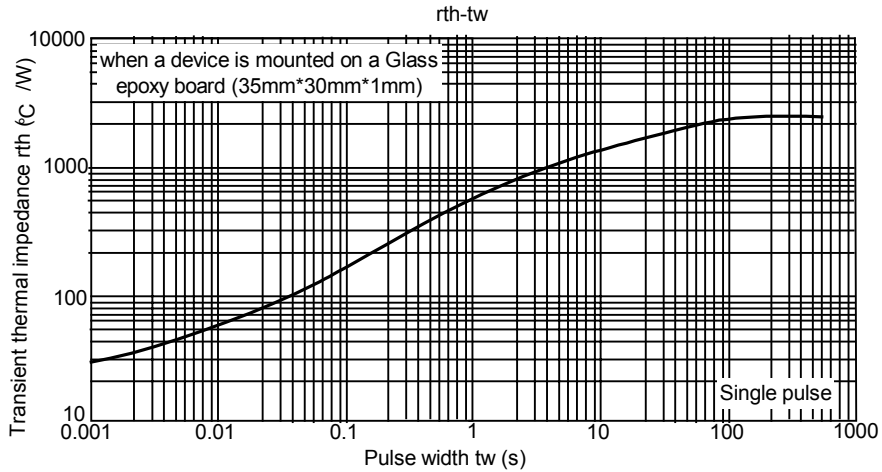
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_c = 1 \text{ mA}, I_B = 0$	10			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = 15 \text{ V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = 5 \text{ V}, I_c = 0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE1}$ (Note 2)	$V_{CE} = 1.5 \text{ V}, I_c = 0.5 \text{ A}$	450		700	
	$h_{FE2}$ (Note 2)	$V_{CE} = 1.5 \text{ V}, I_c = 2 \text{ A}$	320			
	$h_{FE3}$ (Note 2)	$V_{CE} = 1.5 \text{ V}, I_c = 5 \text{ A}$	170			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ (note 2)	$I_c = 3 \text{ A}, I_B = 60 \text{ mA}$			0.27	V
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		25		pF

Note 2: Pulse test

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## ELECTRICAL CHARACTERISTICS CURVES





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