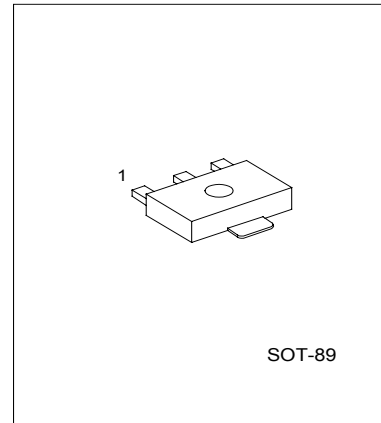


## HIGH VOLTAGE DRIVER APPLICATION

### FEATURES

- \*High breakdown voltage.
- \*Excellent  $h_{FE}$  linearity.



1:EMITTER 2:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-400	V
Collector-Emitter Voltage	$V_{CE0}$	-400	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_c$	-200	mA
Collector Current (PULSE)	$I_{cp}$	-400	mA
Collector Power Dissipation	$P_c$	1.3	W
Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collect-Base Breakdown Voltage	$BV_{CB0}$	$I_C = -10\mu\text{A}, I_E = 0$	-400			V
Collect-Emitter Breakdown Voltage	$BV_{CE0}$	$I_C = -1\text{mA}, I_B = 0, R_{BE} = \infty$	-400			V
Emitter-Base Breakdown Voltage	$BV_{EB0}$	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = -300\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
DC Current Transfer Ratio	$h_{FE}$	$V_{CE} = -10\text{V}, I_c = -50\text{mA}$	60		200	
Collect-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$		-0.8		V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-1.0	V
Output Capacitance	$C_{ob}$	$V_{CB} = -30\text{V}, f = 1\text{MHz}$		5		pF
Reverse Transfer Capacitance	$C_{re}$	$V_{CB} = -30\text{V}, f = 1\text{MHz}$		4		pF
Gain-Bandwidth Product	$f_T$	$V_{CE} = -30\text{V}, I_c = -10\text{mA}$		70		MHz
Turn-on Time	$t_{on}$	See test circuit		0.25		$\mu\text{s}$
Turn-off Time	$t_{off}$	See test circuit		5.0		$\mu\text{s}$

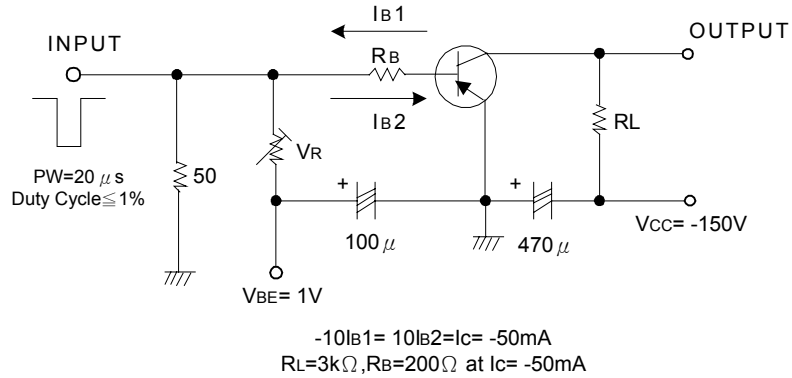
# UTC2SA1740

# PNP EPITAXIAL SILICON TRANSISTOR

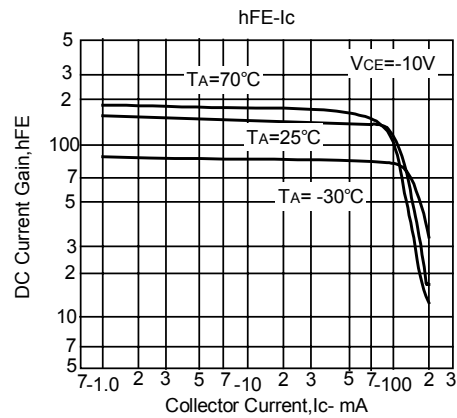
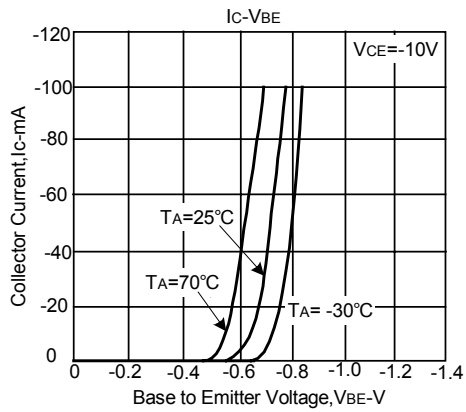
### CLASSIFICATION OF hFE

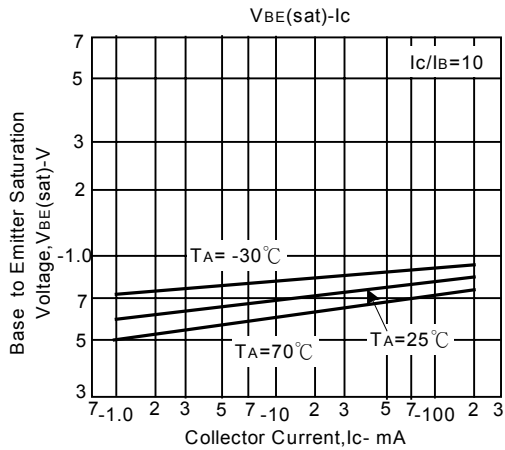
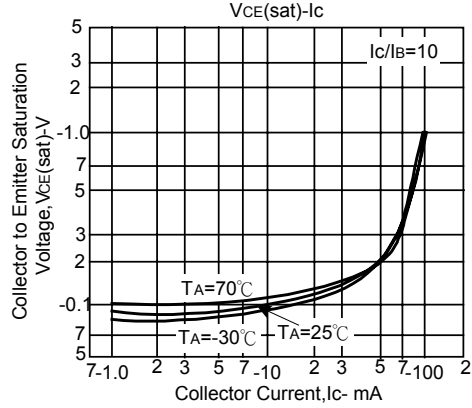
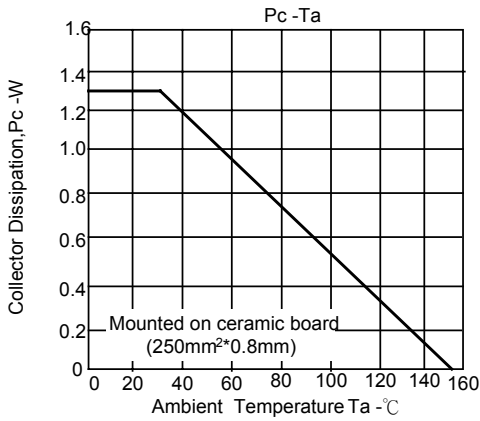
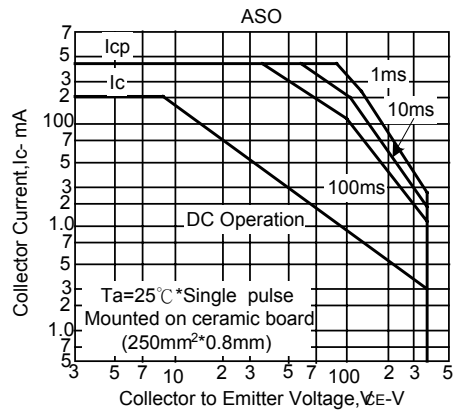
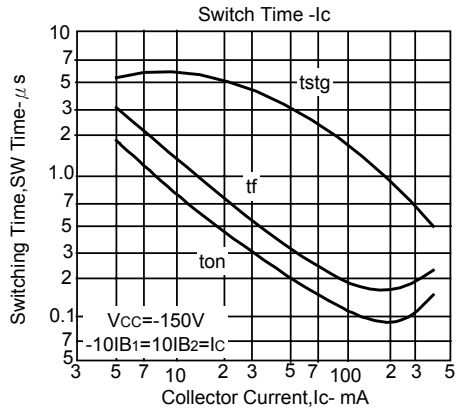
RANK	D	E
RANGE	60-120	100-200

### TEST CIRCUIT (Unit : (resistance : $\Omega$ , capacitance : F)



### ELECTRICAL CHARACTERISTICS CURVES





UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.