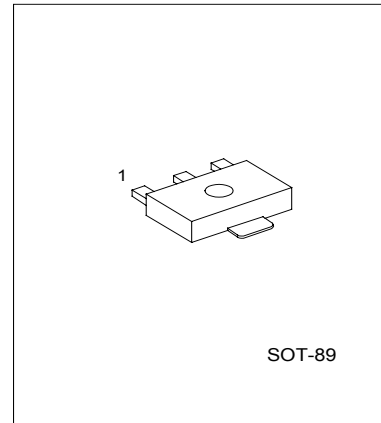


UTC2SC4548 NPN EPITAXIAL PLANAR SILICON TRANSISTOR

HIGH VOLTAGE DRIVER APPLICATION

FEATURES

- *High breakdown voltage.
- *Excellent hFE linearity.



SOT-89

1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

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	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

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

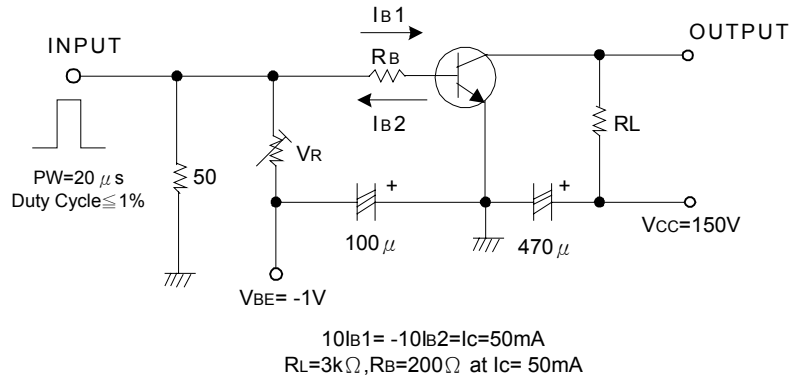
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collect-Base Breakdown Voltage	BV _{CB0}	I _C = 10μA, I _E =0	400			V
Collect-Emitter Breakdown Voltage	BV _{CE0}	I _C = 1mA, I _B =0, R _{BE} =∞	400			V
Emitter-Base Breakdown Voltage	BV _{EB0}	I _E = 10μA, I _C =0	5			V
Collector Cutoff Current	I _{CBO}	V _{CB} = 300V, I _E =0			0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	μA
DC Current Transfer Ratio	h _{FE}	V _{CE} =10V, I _c =50mA	60		200	
Collect-Emitter Saturation Voltage	V _{CE(sat)}	I _C =50mA, I _B =5mA		0.6		V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =50mA, I _B =5mA			1.0	V
Output Capacitance	C _{ob}	V _{CB} =30V, f=1MHz		4		pF
Reverse Transfer Capacitance	C _{re}	V _{CB} =30V, f=1MHz		3		pF
Gain-Bandwidth Product	f _T	V _{CE} =30V, I _c =10mA		70		MHz
Turn-on Time	t _{on}	See test circuit		0.25		μs
Turn-off Time	t _{off}	See test circuit		5.0		μs

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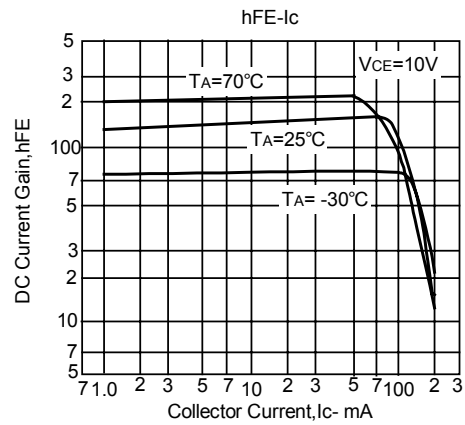
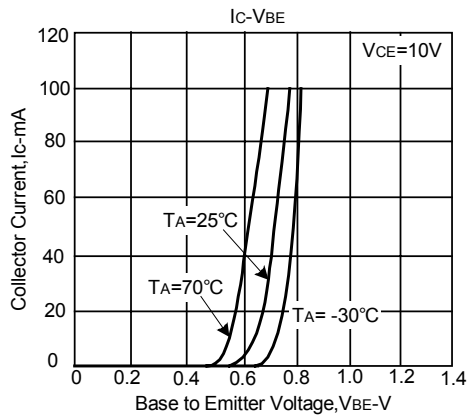
CLASSIFICATION OF hFE

RANK	D	E
RANGE	60-120	100-200

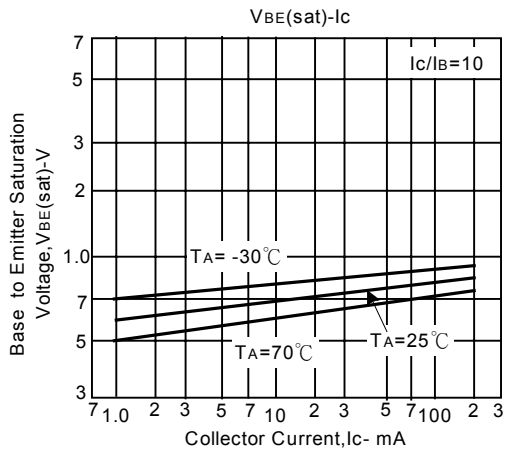
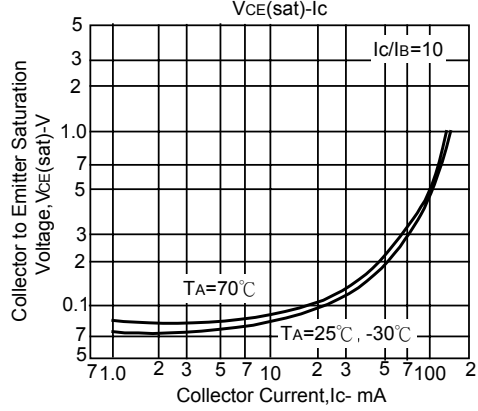
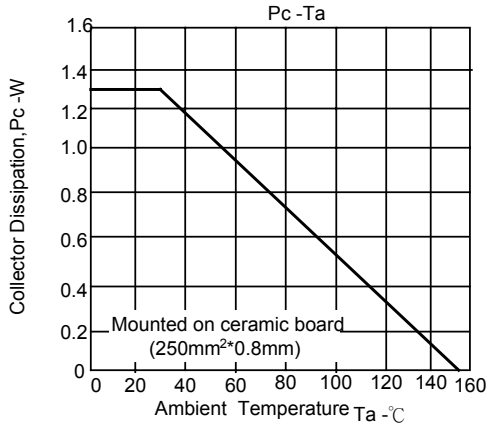
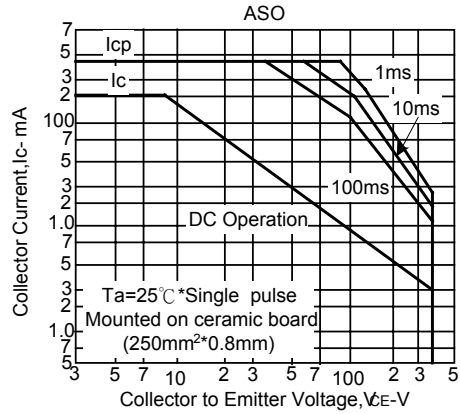
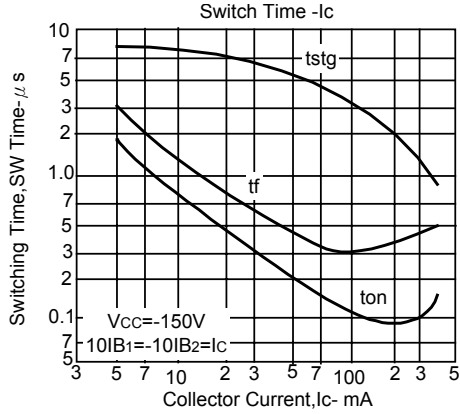
TEST CIRCUIT (Unit : resistance : Ω , capacitance : F)



ELECTRICAL CHARACTERISTICS CURVES



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