

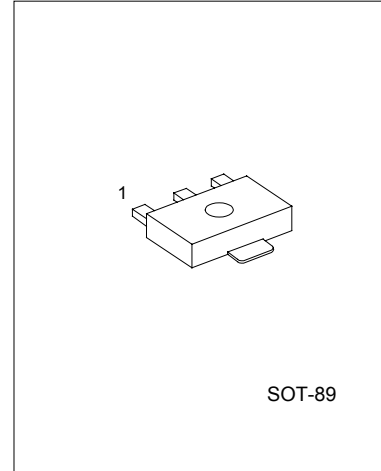
POWER TRANSISTOR

FEATURES

*Low saturation voltage.

$V_{CE(sat)} = -0.35V(\text{Max})$ at $I_C / I_B = -1A / -50mA$

*Excellent DC current gain characteristics



SOT-89

1:EMITTER 2:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CE0}	-50	V
Emitter-Base Voltage	V_{EB0}	-6	V
Collector Power Dissipation	P_c	0.5	W
Collector Current(DC)	I_c	-2	A
Collector Current(PULSE) (note 1)	I_c	-5	A
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	TSTG	-55 ~ +150	$^\circ\text{C}$

Note1: Single pulse, $PW = 10\text{ms}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base Breakdown Voltage	BV_{CB0}	$I_c = -50\mu\text{A}$	-50			V
Collector-emitter Breakdown Voltage	BV_{CE0}	$I_c = -1\text{mA}$	-50			V
Emitter-base Breakdown Voltage	BV_{EB0}	$I_E = -50\mu\text{A}$	-6			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -50\text{V}$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -5\text{V}$			-0.1	μA
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C/I_B = -1A/-50mA$ (note1)		-0.15	-0.35	V
DC Current transfer ratio	h_{FE}	$V_{CE} = -2V, I_c = -0.5A$ (note1)	120		400	
Transition Frequency	f_T	$V_{CE} = -2V, I_E = 0.5A, f = 100\text{MHz}$		200		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0A, f = 1\text{MHz}$		36		pF

Note 1: Measured using pulse current.

UTC2SA1797 PNP EPITAXIAL SILICON TRANSISTOR

CLASSIFICATION OF hFE

RANK	A	B
RANGE	120-240	200-400