



HJ45H11-P

PNP SILICON TRANSISTOR

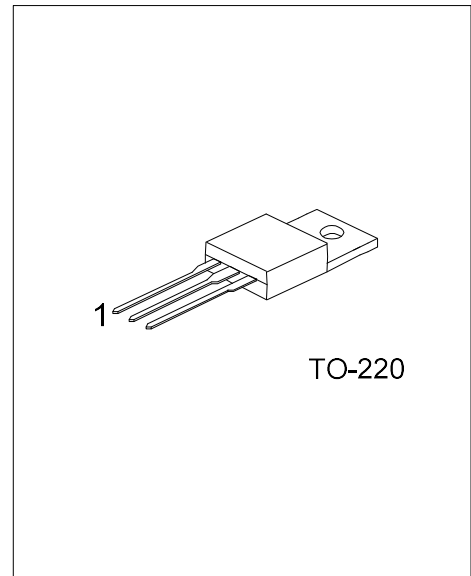
PNP EPITAXIAL PLANAR TRANSISTOR

DESCRIPTION

The **HJ45H11-P** is designed for various specific and general purpose applications, such as: output and driver stages of amplifiers operating at frequencies from DC to greater than 1MHz; series, shunt and switching regulators; low and high frequency inverters/converters; and many others.

FEATURES

* Green Product



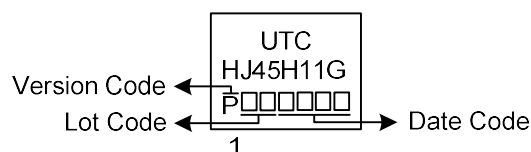
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
HJ45H11G-P-TA3-T	TO-220	B	C	E	Tube

Note: Pin Assignment: B: Base C: Case E: Emitter

HJ45H11G-P-TA3-T (1) Packing Type (2) Package Type (3) Version Code (4) Green Package	(1) T: Tube (2) TA3: TO-220 (3) Version P (4) G: Halogen Free and Lead Free
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MARKING



■ **ABSOLUTE MAXIMUM RATINGS** ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage (Open Emitter)		V_{CBO}	-80	V
Collector- Emitter Voltage		V_{CEO}	-80	V
Collector-Emitter Voltage		V_{CES}	-80	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	Continuous	I_C	-10	A
	Peak ($T_C=25^\circ\text{C}$)	I_{CM}	-15	A
Base Current		I_B	-5	A
Power Dissipation ($T_C=25^\circ\text{C}$)		P_D	65	W
Junction Temperature		T_J	-40 ~ +150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ **THERMAL DATA**

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	θ_{JC}	1.92	$^\circ\text{C/W}$

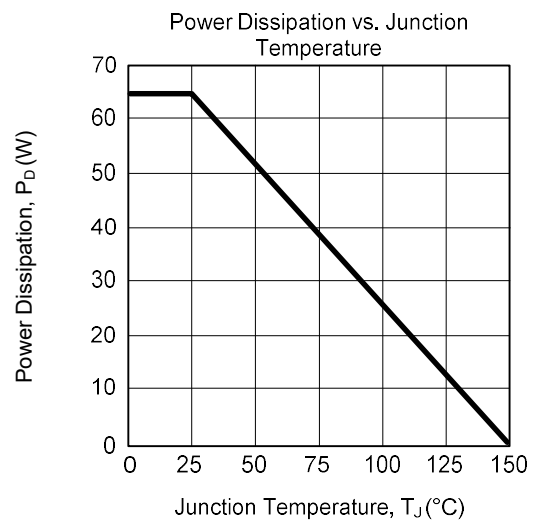
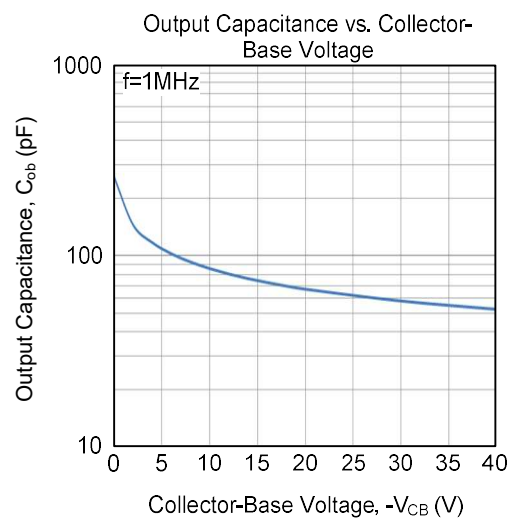
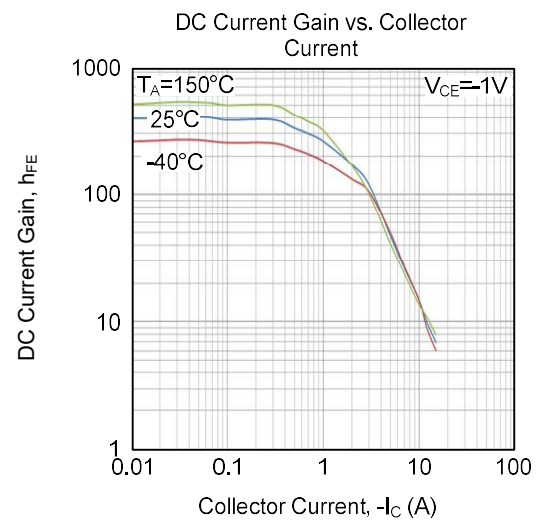
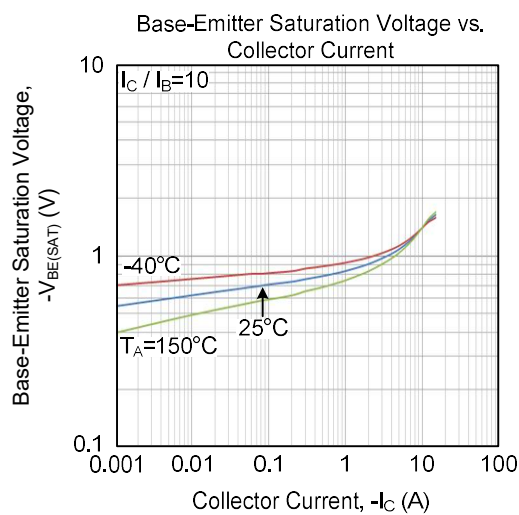
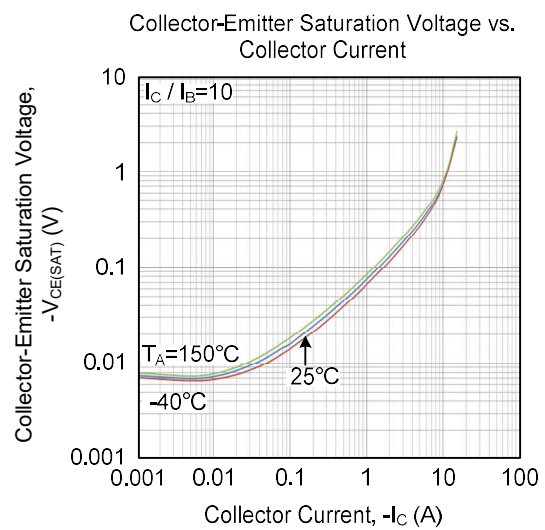
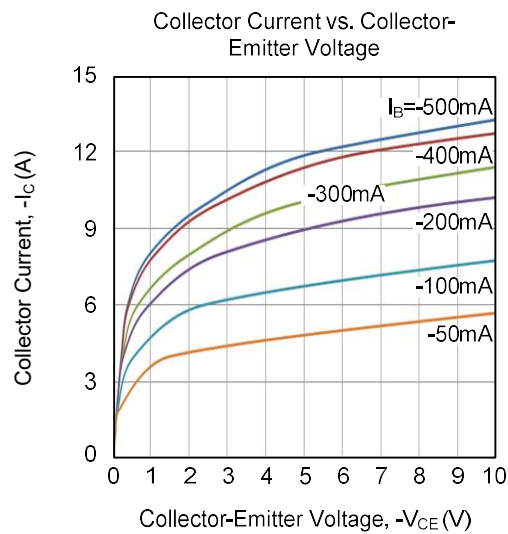
Note: Device mounted on FR-4 substrate P_C board, 2oz copper, with 1inch square copper plate.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	BV_{CBO}	$I_C = -1\text{mA}$, $I_E = 0$	-80			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -30\text{mA}$, $I_B = 0$	-80			V
Collector-Emitter Breakdown Voltage	BV_{CES}	$I_C = -1\text{mA}$, $I_B = 0$	-80			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -1\text{mA}$, $I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -80\text{V}$, $I_E = 0$			-1	μA
Collector Cut-Off Current	I_{CES}	$V_{CE} = -80\text{V}$, $V_{EB} = 0$			-1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$			-1	μA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)}$	$I_C = -8\text{A}$, $I_B = -0.8\text{A}$			-1	V
Base-Emitter Saturation Voltage (Note)	$V_{BE(SAT)}$	$I_C = -8\text{A}$, $I_B = -0.8\text{A}$			-1.5	V
DC Current Gain (Note)	h_{FE1}	$V_{CE} = -1\text{V}$, $I_C = -2\text{A}$	60			
	h_{FE2}	$V_{CE} = -1\text{V}$, $I_C = -4\text{A}$	40			
Output Capacitance	C_{OB}	$V_{CB} = -10\text{V}$		86		pF
Transition Frequency	f_T	$V_{CE} = 10\text{V}$, $I_C = 500\text{mA}$, $f = 20\text{MHz}$		50		MHz

Note: Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$.

■ TYPICAL CHARACTERISTICS



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