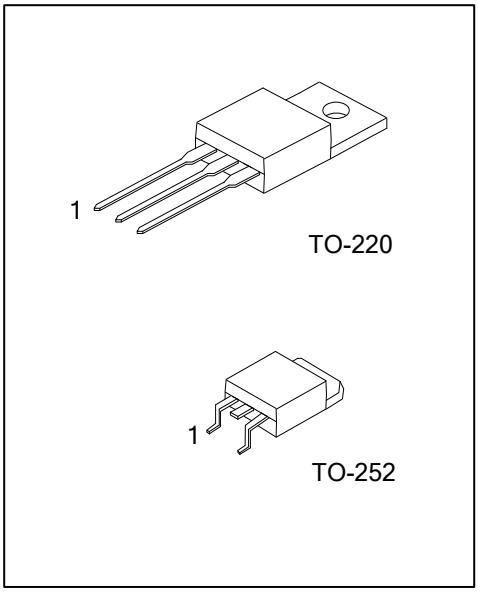
BU406A

Advance ***NPN EXPITAXIAL TRANSISTOR***

NPN EXPITAXIAL PLANAR TRANSISTOR



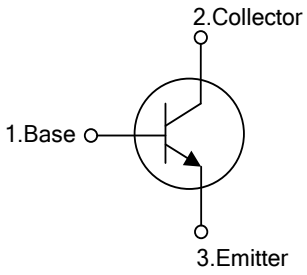
■ DESCRIPTION

The UTC **BU406A** is a NPN epitaxial planar transistor, designed for using in general purpose amplifier and switching applications.

■ FEATURES

* High voltage

■ SYMBOL



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BU406AL-TA3-T	BU406AG-TA3-T	TO-220	B	C	E	Tube
BU406AL-TN3-R	BU406AG-TN3-R	TO-252	B	C	E	Tape Reel

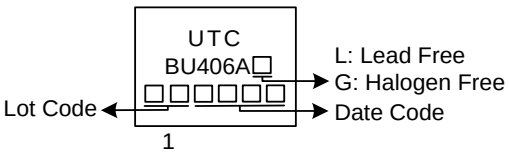
Note: Pin Assignment: B: Base C: Collector E: Emitter

BU406AG-TA3-T

(1) Packing Type
(2) Package Type
(3) Green Package

(1) T: Tube, R: Tape Reel
(2) TA3: TO-220, TN3: TO-252
(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_C=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CBO}	100	V
Collector-Emitter Voltage		V_{CEO}	100	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	6	A
	Pulse		10	A
Base Current		I_B	2	A
Collector Dissipation (T_C=25°C)	TO-220	P_C	60	W
	TO-252		15	W
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-65 ~ +150	°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	TO-220	θ_{JC}	2.08	°C/W
	TO-252		8.33	°C/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining Voltage (Note)	BV_{CEO}	I_C=30mA, I_B=0	100			V
Collector Cutoff Current	I_{CEO}	V_{CE}=60V, I_B=0			0.7	mA
Collector Cutoff Current	I_{CES}	V_{CB}=100V, V_{EB}=0			400	μA
Emitter Cutoff Current	I_{EBO}	V_{BE}=5V, I_C=0			1	mA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)}$	I_C=3A, I_B=600mA			1.5	V
Base Emitter On Voltage	$V_{BE(ON)}$	V_{CE}=4V, I_C=6A			2	V
DC Current Gain (Note)	h_{FE1}	V_{CE}=4V, I_C=0.3A	30			
	h_{FE2}	V_{CE}=4V, I_C=3A	15		75	
Current Gain Bandwidth Product	f_T	V_{CE}=10V, I_C=500mA, f=1MHz	3			MHz

Note: Pulse Test: P_W ≤ 300μs, Duty Cycle ≤ 2%.