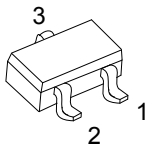
PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR



SOT-23

■ DESCRIPTION

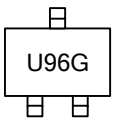
The UTC **UP1496** are series of PNP silicon planar transistors which have gain of 500 at I_C=100mA. It can be used in such applications like battery powered circuits and darlington replacements.

■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
UP1496G-AE3-R	SOT-23	E	B	C	Tape Reel

UP1496G-AE3-R (1)Packing Type (2)Package Type (3)Halogen Free	(1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-220	V
Collector-Emitter Voltage	V_{CEO}	-200	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-0.3	A
Peak Pulse Current	I_{CM}	-1	A
Base Current	I_B	-200	mA
Collector Dissipation (T_a=25°C)	P_C	500	mW
Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-55 ~ +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.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-100 μA	-220			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-10 mA (Note)	-200			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E =-100 μA	-5			V
Collector Cutoff Current	I_{CBO}	V_{CB}=-200 V			-100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-4 V			-100	nA
Collector -Emitter Cut-off Current	I_{CES}	V_{CES}=-200 V			-100	nA
DC Current Transfer Ratio	h_{FE}	V_{CE}=-10V , I_C=-1mA	100			
		V_{CE}=-10V , I_C=-100mA (Note)	100			
		V_{CE}=-10V , I_C=-250mA (Note)	85		300	
		V_{CE}=-10V , I_C=-400mA (Note)	35			
Base-Emitter Turn-On Voltage	$V_{BE(ON)}$	V_{CE}=-10V , I_C =-250 mA (Note)			-0.9	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=-100mA, I_B=-10mA			-0.2	V
		I_C=-250mA, I_B=-25mA (Note)			-0.35	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	I_C=-250mA, I_B=-25mA (Note)			-1.0	V
Transition Frequency	f_T	V_{CE} =-10V , I_C=-50mA, f=100MHz	150			MHz
Output Capacitance	C_{OB}	V_{CB}=-10V, f=1MHz			10	pF

Note: Measured under pulse conditions. Pulse width=300μs. Duty cycle≤2%.