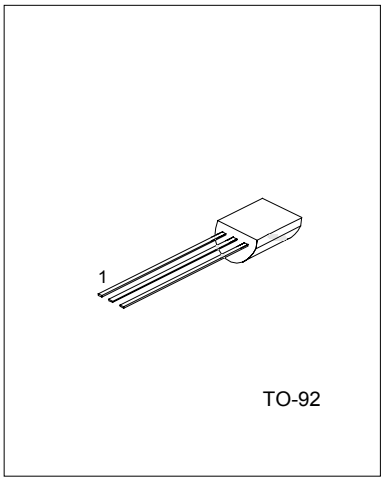
UTC 2N3906 PNP EPITAXIAL PLANAR TRANSISTOR

GENERAL PURPOSE APPLIATION

FEATURES

*Collector-Emitter Voltage: V_{CEO}=40V
*Collector Dissipation: Pc(max)=625mW
*Complementary to 2N3904



TO-92

1:EMITTER 2:BASE 3:COLLECTOR

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	-40	V
Collector-emitter voltage	V_{CEO}	-40	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	Ic	-200	mA
Base Current	I_B	-50	mA
Collector dissipation	Pc	625	mW
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
Collector Cut-off Current	ICEX	V_{CE}=-30V, V_{EB}=-3V			-50	nA
Base Cut-off Current	I_{BL}	V_{CE}=-30V, V_{EB}=-3V			-50	nA
Collector-base breakdown voltage	V_{CBO}	Ic=-10μA,I_E=0	-40			V
Collector-emitter breakdown voltage (note)	V_{CEO}	Ic=-1mA,I_B=0	-40			V
Emitter-base breakdown voltage	V_{EBO}	I_E=-10μA, Ic=0	-6			V
DC current gain (note)	hFE1	V_{CE}=-1V,Ic=-0.1mA	60			
	hFE2	V_{CE}=-1V,Ic=-1mA	80			
	hFE3	V_{CE}=-1V,Ic=-10mA	100		300	
	hFE4	V_{CE}=-1V,Ic=-50mA	60			
	hFE5	V_{CE}=-1V,Ic=-100mA	30			
Collector-emitter saturation voltage (note)	V_{CE}(sat)1	Ic=-10mA,I_B=-1mA			-0.25	V
	V_{CE}(sat)2	Ic=-50mA,I_B=-5mA			-0.4	
Base-emitter saturation voltage	V_{BE}(sat)1	Ic=-10mA,I_B=-1mA	-0.65		-0.85	V
	V_{BE}(sat)2	Ic=-50mA,I_B=-5mA			-0.95	
Transition voltage	f_T	V_{CE}=-20V,Ic=-10mA,f=100MHz	250			MHz

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Output capacitance	Cob	V_{CB}=-5V,I_E=0, f=1MHz			4.5	pF
Turn on time	t_{ON}	Vcc=-3V, V_{BE}=-0.5V, Ic=-10mA, I_{B1}=-1mA			70	ns
Turn off time	t_{OFF}	I_{B1}=1_{B2}=-1mA			300	ns

Note: Pulse test: PW<=300μs, Duty Cycle<=2%