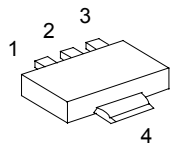
PNP SILICON TRANSISTOR

DESCRIPTION

The UTC PZT4033 designed for high current general purpose amplifier applications.



SOT-223

1:EMITTER 2,4:COLLECTOR 3:BASE

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	-80	V
Collector-emitter voltage	V_{CEO}	-80	V
Emitter-base voltage	V_{EBO}	-5	V
Power dissipation	P_D	2	W
Collector current	Ic	-1	A
Junction Temperature	T_j	-65 ~ +150	°C
Storage Temperature	T_{STG}	-65 ~ +150	
Thermal Resistance	$R_{\theta JA}$	62.5	°C/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV_{CBO}	I_C=-10μA,I_E=0	-80			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-10mA,I_B=0	-80			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=-10μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V,I_E=0			-50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-10	nA
DC current gain(note)	h_{FE}	V_{CE}=-5V,I_C=-0.1mA V_{CE}=-5V,I_C=-100mA V_{CE}=-5V,I_C=-500mA V_{CE}=-5V,I_C=-1A	75 100 70 25		300	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=-150mA,I_B=-15mA I_C=-500mA,I_B=-50mA			-0.15 -0.5	V

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Base-emitter saturation voltage		V_{BE}(sat)	Ic=-150mA,I_B=-15mA Ic=-500mA,I_B=-50mA			-0.9 -1.1	V
Gain Bandwidth Product		f_T	V_{CE}= -10V,Ic= -50mA, f=1MHz	100			MHz
Output capacitance		Cob	V_{CB}=-10V,I_E=0, f=1MHz			20	pF
Intput capacitance		Cib	V_{EB}=-0.5V,I_C=0, f=1MHz			110	pF
Switching Time	Turn-on Time	t_{on}	Ic=-500 mA, V_{CE}= -30V, I_{B1}=- I_{B2}=-50mA			100	ns
	Storage Time	tstg				350	ns
	Fall Time	t_f				50	ns

TYPICAL PARAMETERS PERFORMANCE