
C1815

NPN EPITAXIAL SILICON TRANSISTOR

AUDIO FREQUENCY AMPLIFIER

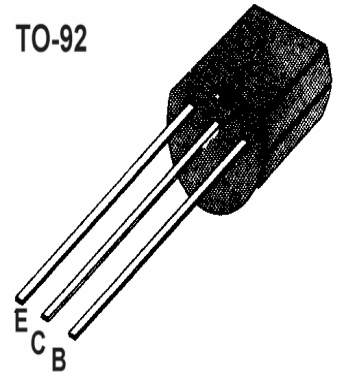
HIGH FREQUENCY OSC

*Complement to A1015

*Collector-Base Voltage VCBO=50V

ABSOLUTE MAXIMUM RATINGS(T_A=25)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter -Base Voltage	V _{EBO}	5	V
Collector Current	I _c	150	mA
Base Current	I _B	50	mA
Collector Dissipation	P _c	400	mW
Junction Temperature	T _J	125	
Storage Temperature	T _{STG}	-55 ~150	



ELECTRICAL CHARACTERISTICS(T_A=25)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Cut-off Current	I _{CB0}	V _{CB} = 60V, I _E =0			0.1	μA
Emitter-Cut-off Current	I _{EBO}	V _{EB} = 5V, I _c =0			0.1	μA
DC Current Gain	h _{FE1}	V _{CE} = 6V, I _c = 2mA	70		700	
	h _{FE2}	V _{CE} = 6V, I _c = 150mA	25			
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _c = 100mA, I _B = 10mA		0.1	0.25	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _c = 100mA, I _B = 10mA			1.0	V
Current Gain-Bandwidth Product	f _T	V _{CE} = 10V, I _c = 1mA	80			MHZ
Output Capacitance	C _{OB}	V _{CB} = 10V, I _E =0, f=1MHZ		2.0	3.0	pF
Noise Figure	NF	V _{CE} = 6V, I _c = 0.1mA		1.0	1.0	dB
		R _G =10K , F=1HZ				

H_{FE} CLASSIFICATION

Classification	O	Y	G	L
H _{FE} (1)	70-140	120-240	200-400	350-700