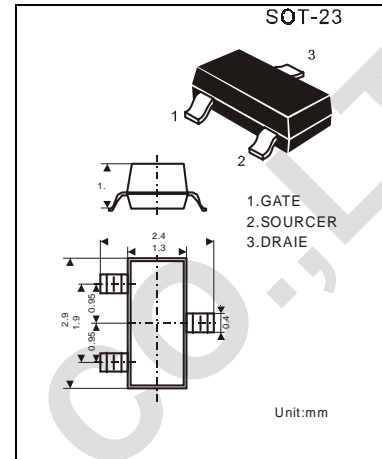


NPN EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTORS

ABSOLUTE MAXIMUM RATINGS at Ta=25°C

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	30	V
Collector-Emitter Voltage	Vceo	25	V
Emitter-Base Voltage	Vebo	5.0	V
Collector Current	Ic	500	mA
Total Device Dissipation FR-5 Board(1) Ta=25°C	P _D	225	mw
Derate above 25°C		1.8	mW/°C
Total Device Dissipation Alumina Substrate,(2) Ta=25°C	P _D	300	mw
Derate above 25°C		2.4	mW/°C
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-150	°C



ELECTRICAL CHARACTERISTICS at Ta=25°C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Voltage	V(BR) _{ceo}	25			V	I _c =10mA I _b =0
Collector-Emitter Voltage	V(BR) _{ces}	30			V	I _c =10uA I _c =0
Emitter Cutoff Current	I _{ebo}			10	uA	V _{eb} =5V I _c =0
Collector Cutoff Current	I _{cbo}			100 5.0	nA uA	V _{cb} =20V I _e =0 V _{cb} =20V I _e =0 T _A =150°C
DC Current Gain	H _{FE}	100 70 40		600		V _{ce} =1.0V I _c =-100mA V _{ce} =1.0V I _c =-300mA V _{ce} =1.0V I _c =-500mA
Collector-Emitter Saturation Voltage	V _{ce(sat)}			620	mV	I _c =-500mA I _b =-50mA
Base-Emitter Saturation Voltage	V _{be(on)}		1.2		V	V _{be} =1V I _c =500mA

* 1.Total Device Dissipation : FR=1x0.75x0.062in .
2.Alumina=0.4 x 0.3 x 0.024in.99.5% alumina

DEVICE MARKING:

BCX20LT1=U2