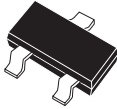


CMPT918

NPN SILICON RF TRANSISTOR



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT918 type is an NPN silicon RF transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high frequency (VHF/UHF) amplifier and oscillator applications.

Marking code is C3B.

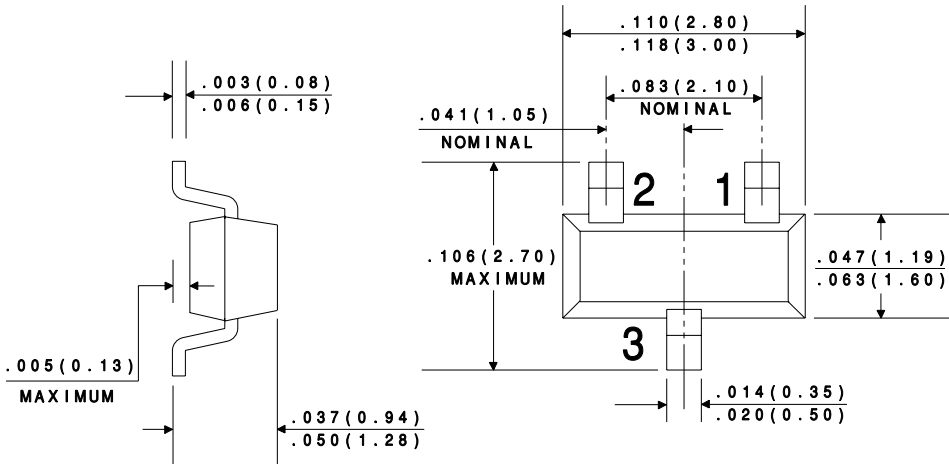
MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	30	V
Collector-Emitter Voltage	V _{CEO}	15	V
Emitter-Base Voltage	V _{EBO}	3.0	V
Collector Current	I _C	50	mA
Power Dissipation	P _D	350	mW
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =15V		10	nA
BV _{CBO}	I _C =1.0μA	30		V
BV _{CEO}	I _C =3.0mA	15		V
BV _{EBO}	I _E =10μA	3.0		V
V _{CE} (SAT)	I _C =10mA, I _B =1.0mA		0.4	V
V _{BE} (SAT)	I _C =10mA, I _B =1.0mA		1.0	V
h _{FE}	V _{CE} =1.0V, I _C =3.0mA	20		
f _T	V _{CE} =10V, I _C =4.0mA, f=100MHz	600		MHz
C _{ob}	V _{CB} =0V, I _E =0, f=1.0MHz		3.0	pF
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		1.7	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		2.0	pF
P _{out}	V _{CB} =15V, I _C =8.0mA, f=500MHz	30		mW
G _{pe}	V _{CB} =12V, I _C =6.0mA, f=200MHz	11		dB
NF	V _{CE} =6.0V, I _C =1.0mA, R _S =50Ω, f=60MHz		6.0	dB

All dimensions in inches (mm).



LEAD CODE:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR