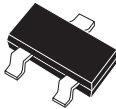


CMPT3019

NPN SILICON TRANSISTOR



SOT-23 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CMPT3019 type is an NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for very high current, general purpose amplifier applications.

Marking Code is C3A.

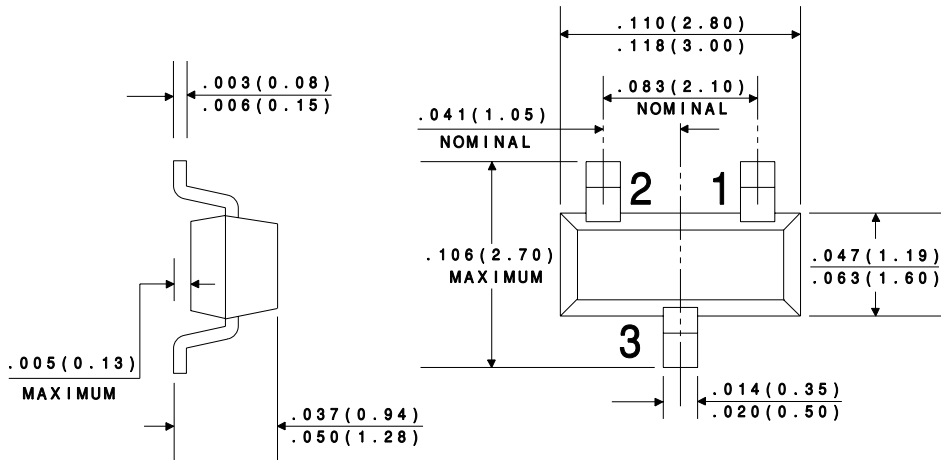
MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	120	V
Collector-Emitter Voltage	V _{CEO}	80	V
Emitter-Base Voltage	V _{EBO}	7.0	V
Collector Current	I _C	500	A
Collector Current (Peak)	I _{CM}	1.0	A
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} =90V		10	nA
I _{EBO}	V _{EB} =5.0V		10	nA
BV _{CBO}	I _C =100μA	120		V
BV _{CEO}	I _C =30mA	80		V
BV _{EBO}	I _E =100μA	7.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.2	V
V _{CE(SAT)}	I _C =500mA, I _B =50mA		0.5	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA		1.1	V
h _{FE}	V _{CE} =10V, I _C =0.1mA	50		
h _{FE}	V _{CE} =10V, I _C =10mA	90		
h _{FE}	V _{CE} =10V, I _C =150mA	100	300	
h _{FE}	V _{CE} =10V, I _C =500mA	50		
f _T	V _{CE} =10V, I _C =50mA, f=1.0MHz	100		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		12	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		60	pF
NF	V _{CE} =10V, I _C =100mA, R _S =1kΩ, f=1.0kHz		4.0	dB

All dimensions in inches (mm).



LEAD CODE:

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