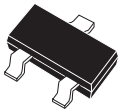
CMPT5086
CMPT5087

PNP SILICON TRANSISTOR



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT5086, CMPT5087 types are PNP silicon transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring high gain and low noise.
Marking Codes are C2P and C2Q Respectively.

MAXIMUM RATINGS (T_A=25°C)

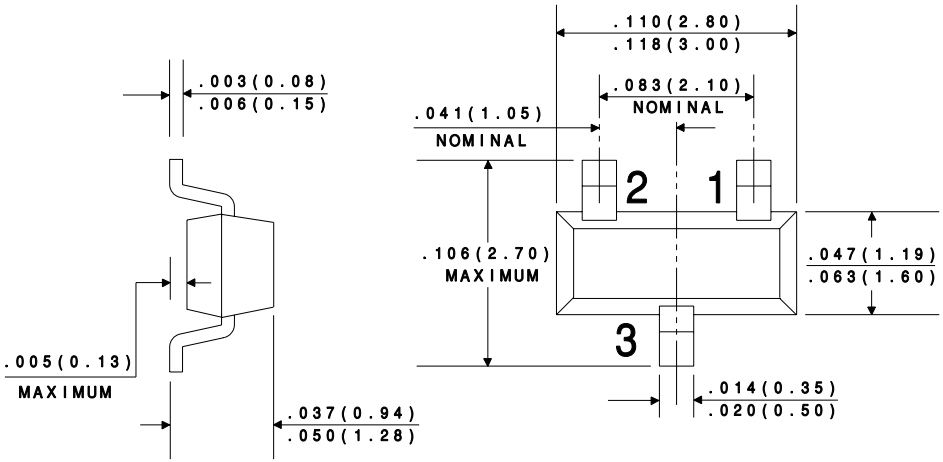
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Collector Current	I_C	50	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

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

		CMPT5086		CMPT5087		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=10V		10		10	nA
I_{CBO}	V_{CB}=35V		50		50	nA
BV_{CBO}	I_C=100μA	50		50		V
BV_{CEO}	I_C=1.0mA	50		50		V
BV_{EBO}	I_E=100μA	3.0		3.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.30		0.30	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA		0.85		0.85	V
h_{FE}	V_{CE}=5.0V, I_C=0.1mA	150	500	250	800	
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	150		250		
h_{FE}	V_{CE}=5.0V, I_C=10mA	150		250		
f_T	V_{CE}=5.0V, I_C=500μA, f=20MHz	40		40		MHz
C_{ob}	V_{CB}=5.0V, I_E=0, f=1.0MHz		4.0		4.0	pF
h_{fe}	V_{CE}=5.0V, I_C=1.0mA, f=1.0kHz	150	600	250	900	

SYMBOL	TEST CONDITIONS	CMPT5086 MIN	CMPT5086 MAX	CMPT5087 MIN	CMPT5087 MAX	UNITS
NF	V_{CE}=5.0V, I_C=20mA, R_S=10kΩ f=10Hz to 15.7kHz		3.0		2.0	dB
NF	V_{CE}=5.0V, I_C=100μA, R_S=3.0kΩ, f=1.0kHz		3.0		2.0	dB

All dimensions in inches (mm).



LEAD CODE:

1) BASE
2) EMITTER
3) COLLECTOR

R2