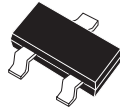


**CMPT5086  
CMPT5087**

**PNP SILICON TRANSISTOR**



**SOT-23 CASE**

**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** ( $T_A=25^{\circ}\text{C}$ )

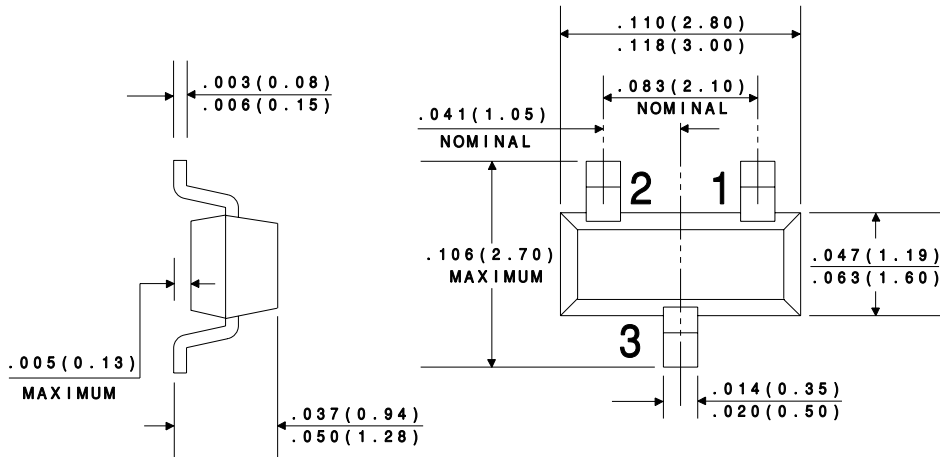
	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	3.0	V
Collector Current	$I_C$	50	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal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

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

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

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

All dimensions in inches (mm).



LEAD CODE:

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



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