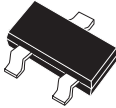


## CMPT2907A

### PNP SILICON TRANSISTOR



SOT-23 CASE

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT2907A type is an PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose and switching applications.

**Marking Code is C2F.**

### MAXIMUM RATINGS (T<sub>A</sub>=25°C)

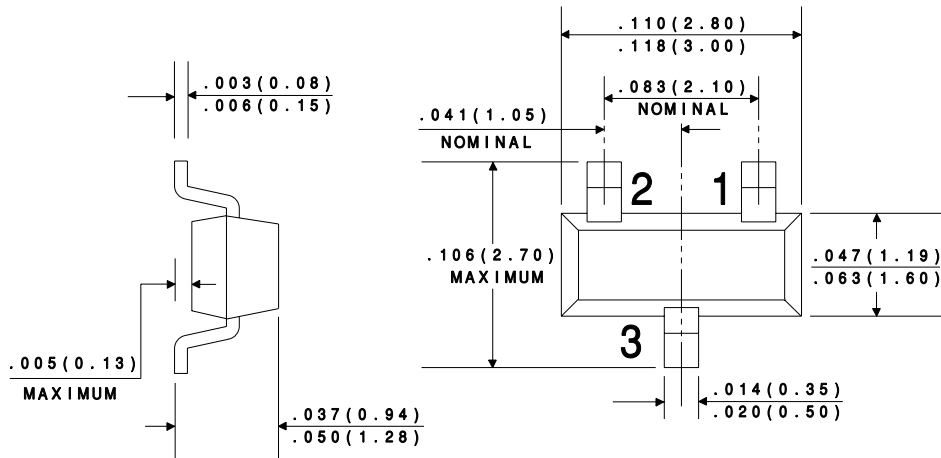
	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CB0</sub>	60	V
Collector-Emitter Voltage	V <sub>CEO</sub>	60	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Collector Current	I <sub>C</sub>	600	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage			
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CB0</sub>	V <sub>CB</sub> =50V		10	nA
I <sub>CB0</sub>	V <sub>CB</sub> =50V, T <sub>A</sub> =125°C		10	μA
I <sub>CEV</sub>	V <sub>CE</sub> =30V, V <sub>BE</sub> =0.5V		50	nA
BV <sub>CB0</sub>	I <sub>C</sub> =10μA	60		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	60		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.4	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.6	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.3	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		2.6	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1mA	75		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	100		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	100		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =150mA	100	300	

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$h_{FE}$	$V_{CE}=10V, I_C=500mA$	50		
$f_T$	$V_{CE}=20V, I_C=50mA, f=100MHz$	200		MHz
$C_{ob}$	$V_{CB}=10V, I_E=0, f=1.0MHz$		8.0	pF
$C_{ib}$	$V_{BE}=2.0V, I_C=0, f=1.0MHz$		30	pF
$t_{on}$	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		45	ns
$t_d$	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		10	ns
$t_r$	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		40	ns
$t_{off}$	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		100	ns
$t_s$	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		80	ns
$t_f$	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		30	ns

All dimensions in inches (mm).



LEAD CODE:

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