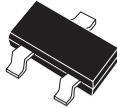


**CMPT8099 NPN**  
**CMPT8599 PNP**

**COMPLEMENTARY**  
**SILICON TRANSISTOR**



**SOT-23 CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPT8099, CMPT8599 types are Complementary Silicon Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for general purpose audio amplifier applications.

**Marking Codes are CKB and C2W**  
**Respectively.**

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

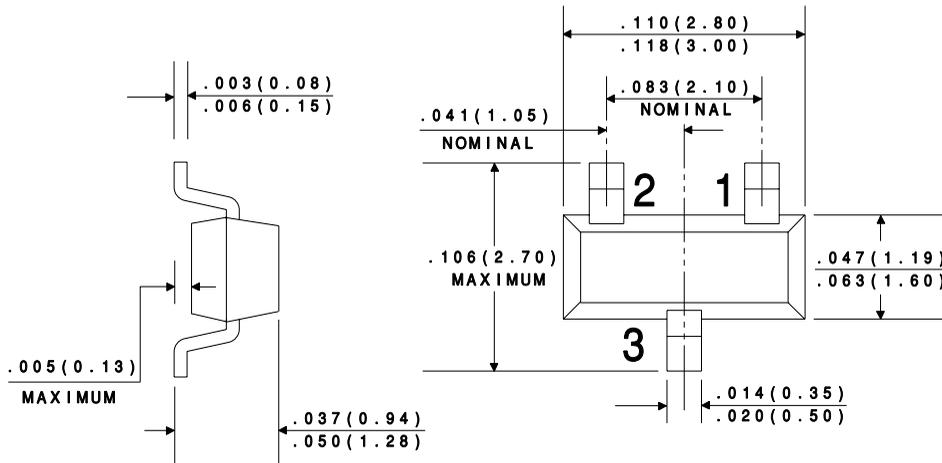
	<b>SYMBOL</b>	<b>CMPT8099</b>	<b>CMPT8599</b>	<b>UNITS</b>
Collector-Base Voltage	$V_{CB0}$	80	80	V
Collector-Emitter Voltage	$V_{CEO}$	80	80	V
Emitter-Base Voltage	$V_{EBO}$	6.0	5.0	V
Collector Current	$I_C$		500	mA
Power Dissipation	$P_D$		350	mW
Operating and Storage				
Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	357		$^{\circ}\text{C}/\text{W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>CMPT8099</b>		<b>CMPT8599</b>		<b>UNITS</b>
		<b>MIN</b>	<b>MAX</b>	<b>MIN</b>	<b>MAX</b>	
$I_{CBO}$	$V_{CB}=80\text{V}$		0.1		0.1	mA
$I_{EBO}$	$V_{BE}=6.0\text{V}$		0.1		-	mA
$I_{EBO}$	$V_{BE}=4.0\text{V}$		-		0.1	mA
$BV_{CBO}$	$I_C=100\text{mA}$	80		80		V
$BV_{CEO}$	$I_C=10\text{mA}$	80		80		V
$BV_{EBO}$	$I_E=10\text{mA}$	6.0		5.0		V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		0.4		0.4	V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.3		0.3	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	0.6	0.8	0.6	0.8	V
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	100	300	100	300	
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	100		100		

SYMBOL	TEST CONDITIONS	CMPT8099		CMPT8599		UNITS
		MIN	MAX	MIN	MAX	
$h_{FE}$	$V_{CE}=5.0V, I_C=100mA$	75		75		
$f_T$	$V_{CE}=5.0V, I_C=10mA, f=100MHz$	150		150		MHz
$C_{ob}$	$V_{CB}=10V, I_E=0, f=1.0MHz$		6.0		4.5	pF
$C_{ib}$	$V_{BE}=0.5V, I_C=0, f=1.0MHz$		25		30	pF

All dimensions in inches (mm).



LEAD CODE:

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