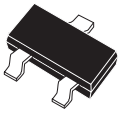
CMPT8099 NPN
CMPT8599 PNP

COMPLEMENTARY SILICON TRANSISTOR



SOT-23 CASE

Central™
Semiconductor Corp.

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°C)

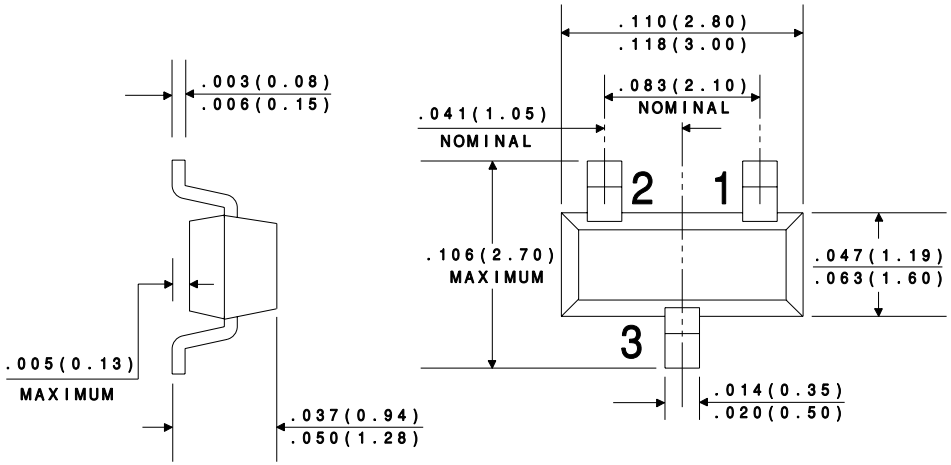
	SYMBOL	CMPT8099	CMPT8599	UNITS
Collector-Base Voltage	V_{CBO}	80	80	V
Collector-Emitter Voltage	V_{CEO}	80	80	V
Emitter-Base Voltage	V_{EBO}	6.0	5.0	V
Collector Current	I_C	500		mA
Power Dissipation	P_D	350		mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150		°C
Thermal Resistance	Θ_{JA}	357		°C/W

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

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

SYMBOL	TEST CONDITIONS	CMPT8099 MIN	CMPT8099 MAX	CMPT8599 MIN	CMPT8599 MAX	UNITS
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

R2

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