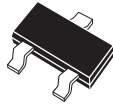


CMPTA06 NPN
CMPTA56 PNP

SURFACE MOUNT
COMPLEMENTARY
SILICON TRANSISTORS



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPTA06, CMPTA56 types are complementary silicon transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose and switching applications.

**MARKING CODES: CMPTA06 : C1G
CMPTA56 : C2G**

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

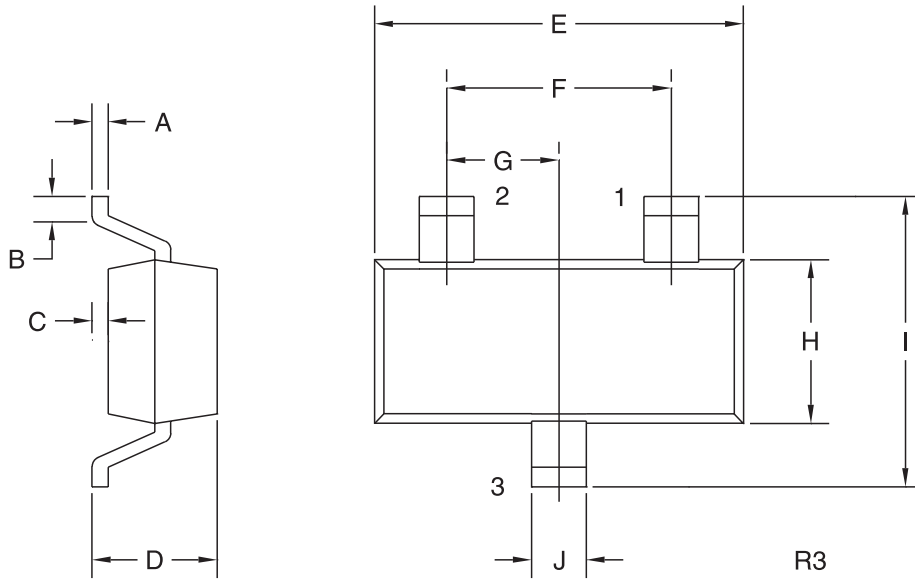
	SYMBOL		UNITS
Collector-Base Voltage	V_{CB0}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	500	mA
Base Current	I_B	100	mA
Peak Base Current	I_{BM}	200	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=80\text{V}$		100	nA
I_{CBO}	$V_{CB}=80\text{V}, T_A=150^\circ\text{C}$		20	μA
I_{CEO}	$V_{CE}=60\text{V}$		100	nA
BV_{CEO}	$I_C=1.0\text{mA}$	80		V
BV_{EBO}	$I_E=100\mu\text{A}$	4.0		V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.25	V
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$		1.20	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=10\text{mA}$	100		
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$	100		
f_T	$V_{CE}=2.0\text{V}, I_C=10\text{mA}, f=100\text{MHz}$ (CMPTA06)	100		MHz
f_T	$V_{CE}=1.0\text{V}, I_C=100\text{mA}, f=100\text{MHz}$ (CMPTA56)	50		MHz

R5 (13-November 2002)

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE:

CMPTA06: C1G
CMPTA56: C2G

SYMBOL	DIMENSIONS		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)