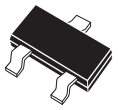
CMPTA06 NPN
CMPTA56 PNP

SURFACE MOUNT
COMPLEMENTARY
SILICON TRANSISTORS



SOT-23 CASE

Central™
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°C)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	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	°C
Thermal Resistance	Θ_{JA}	357	°C/W

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

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

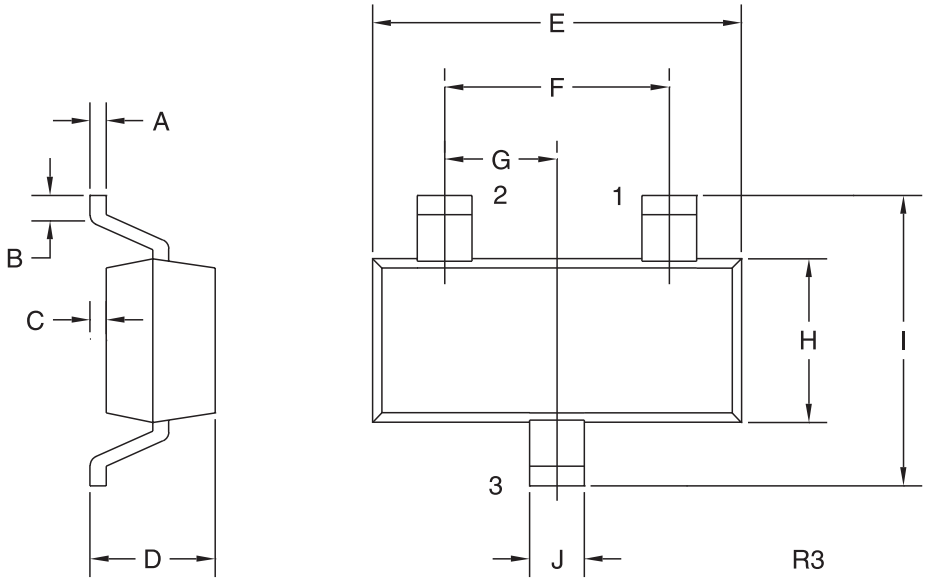
R5 (13-November 2002)

Central™
Semiconductor Corp.

CMPTA06 NPN
CMPTA56 PNP

SURFACE MOUNT
COMPLEMENTARY
SILICON TRANSISTORS

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) BASE
2) EMITTER
3) COLLECTOR

MARKING CODE:
CMPTA06: C1G
CMPTA56: C2G

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R5 (13-November 2002)