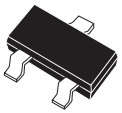
CMPT3640

PNP SILICON TRANSISTOR



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT3640 type is an PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for saturated switching applications. **Marking code is C2J.**

MAXIMUM RATINGS (T_A=25°C)

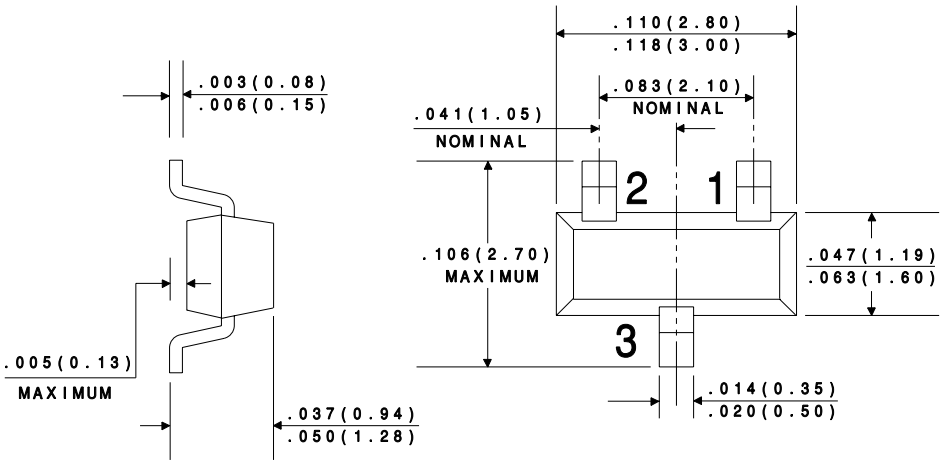
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	12	V
Collector-Emitter Voltage	V_{CEO}	12	V
Emitter-Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	80	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CES}	V_{CE}=6.0V		10	nA
I_{CES}	V_{CE}=6.0V, T_A=65°C		10	μA
I_B	V_{CE}=6.0V, V_{EB}=0		10	nA
BV_{CBO}	I_C=100μA	12		V
BV_{CEO}	I_C=10mA	12		V
BV_{EBO}	I_E=100μA	4.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.20	V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		0.60	V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA, T_A=65°C		0.25	V
$V_{BE(SAT)}$	I_C=10mA, I_B=0.5mA	0.75	0.95	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA	0.80	1.00	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA		1.50	V
h_{FE}	V_{CE}=0.3V, I_C=10mA	30	120	

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{FE}	V_{CE}=1.0V, I_C=50mA	20		
f_T	V_{CE}=5.0V, I_C=10mA, f=100MHz	500		MHz
C_{ob}	V_{CB}=5.0V, I_E=0, f=1.0MHz		3.5	pF
C_{ib}	V_{BE}=0.5V, I_C=0, f=1.0MHz		3.5	pF
t_d	V_{CC}=6.0V, V_{BE}=1.9, I_C=50mA, I_{B1}=5.0mA		10	ns
t_r	V_{CC}=6.0V, V_{BE}=1.9, I_C=50mA, I_{B1}=5.0mA		30	ns
t_s	V_{CC}=6.0V, I_C=50mA, I_{B1}=I_{B2}=5.0mA		20	ns
t_f	V_{CC}=6.0V, I_C=50mA, I_{B1}=I_{B2}=5.0mA		12	ns
t_{on}	V_{CC}=6.0V, V_{BE}=1.9, I_C=50mA, I_{B1}=5.0mA		25	ns
t_{on}	V_{CC}=1.5V, I_C=10mA, I_{B1}=0.5mA		60	ns
t_{off}	V_{CC}=6.0V, V_{BE}=1.9, I_C=50mA, I_{B1}=5.0mA		35	ns
t_{off}	V_{CC}=1.5V, I_C=10mA, I_{B1}=I_{B2}=0.5mA		75	ns

All dimensions in inches (mm).



LEAD CODE:

1) BASE
2) EMITTER
3) COLLECTOR

R2

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.