

SURFACE MOUNT NPN SILICON TRANSISTOR



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT2369 type is an NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose and high speed switching applications.

MARKING CODE: C1J

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	40	V
Collector-Emitter Voltage	V _{CES}	40	V
Collector-Emitter Voltage	V _{CEO}	15	V
Emitter-Base Voltage	V _{EBO}	4.5	V
Continuous Collector Current	Ι _C	500	mA
Power Dissipation	PD	350	mW
Operating and Storage Junction Temperature	т _Ј , Т _{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} =20V		0.4	μA
I _{CBO}	V _{CB} =20V, T _A =125°C		30	μA
BVCBO	Ι _C =10μΑ	40		V
BVCES	Ι _C =10μΑ	40		V
BVCEO	I _C =10mA	15		V
BVEBO	I _E =10μA	4.5		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.25	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA	0.7	0.85	V
h _{FE}	V _{CE} =1.0V, I _C =10mA	40	120	
h _{FE}	V _{CE} =2.0V, I _C =100mA	20		
Cob	V _{CB} =5.0V, I _E =0, f=1.0MHz		4.0	pF
f _T	V _{CE} =10V, I _C =10mA, f=100MHz	500		MHz
t _s	V _{CC} =3.0V, I _C =I _{B1} =I _{B2} =10mA		13	ns
t _{on}	V _{CC} =3.0V, I _C =10mA, I _{B1} =3.0mA		12	ns
toff	V_{CC} =3.0V, I _C =10mA, I _{B1} =3.0mA, I _{B2} =1.5mA		18	ns

R5 (1-February 2010)

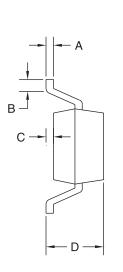


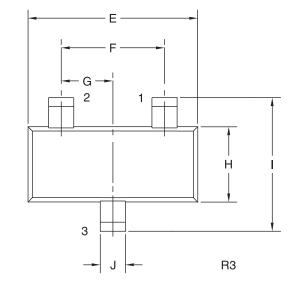


CMPT2369

SURFACE MOUNT NPN SILICON TRANSISTOR

SOT-23 CASE - MECHANICAL OUTLINE





LEAD CODE:
1) Base
2) Emitter

2) Emitter
3) Collector

MARKING CODE: C1J

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
А	0.003	0.007	0.08	0.18			
В	0.006	-	0.15	-			
С	-	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				
Н	0.047	0.055	1.19	1.40			
	0.083	0.098	2.10	2.49			
J	0.014	0.020	0.35	0.50			

SOT-23 (REV: R3)

R5 (1-February 2010)

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OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- · Environmental regulation compliance
- Customer specific screening
- · Up-screening capabilities

· Custom product packing

Custom bar coding for shipments

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · Custom product and package development

REQUESTING PRODUCT PLATING

- If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when 1. ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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