

SURFACE MOUNT NPN LOW NOISE SILICON TRANSISTOR



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# DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT2484 type is an NPN silicon low noise transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for low noise amplifier applications.

### MARKING CODE: C1U

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CBO</sub>	60	V
Collector-Emitter Voltage	VCEO	60	V
Emitter-Base Voltage	V <sub>EBO</sub>	6.0	V
Continuous Collector Current	Ι <sub>C</sub>	50	mA
Power Dissipation	PD	350	mW
Operating and Storage Junction Temperature	т <sub>Ј</sub> , Т <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	ΘJΑ	357	°C/W

ELECTRICAL CHARACTERISTICS: (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
ICBO	V <sub>CB</sub> =45V		10	nA
ICBO	V <sub>CB</sub> =45V, T <sub>A</sub> =150°C		10	μΑ
IEBO	V <sub>EB</sub> =5.0V		10	nA
BVCBO	Ι <sub>C</sub> =10μΑ	60		V
BVCEO	I <sub>C</sub> =10mA	60		V
BVEBO	I <sub>E</sub> =10µA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0mA, I <sub>B</sub> =100μA		0.35	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0mA		0.95	V
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0mA	250		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA		800	
Cob	V <sub>CB</sub> =5.0V, I <sub>E</sub> =0, f=1.0MHz		6.0	pF
C <sub>ib</sub>	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=1.0MHz		6.0	pF
NF	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10μA, R <sub>S</sub> =10kΩ,			
	f=1.0kHz, BW=200Hz		3.0	dB

R5 (1-February 2010)

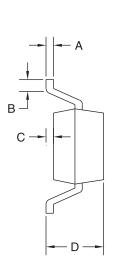


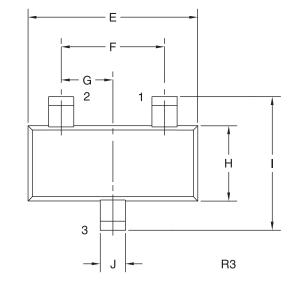




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## SOT-23 CASE - MECHANICAL OUTLINE





LEAD CODE:
1) Base
2) Emittor

2) Emitter
3) Collector

MARKING CODE: C1U

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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- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities

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

## CONTACT US

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