CMPTA29

SURFACE MOUNT HIGH VOLTAGE NPN SILICON DARLINGTON TRANSISTOR



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPTA29 is an NPN silicon darlington transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring extremely high voltage and high gain.

MARKING CODE: C29



MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V _{CES}	100	V
Emitter-Base Voltage	V_{EBO}	12	V
Continuous Collector Current	IC	500	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)

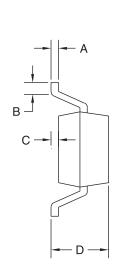
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
ICES	V _{CE} =80V		500	nA
I _{CBO}	V _{CB} =80V		100	nA
I _{EBO}	V _{BE} =10V		100	nA
BVCES	I _C =100μA	100		V
BV _{CBO}	I _C =100μA	100		V
BVEBO	I _E =10μA	12		V
VCE(SAT)	I _C =10mA, I _B =10μA		1.2	V
VCE(SAT)	I _C =100mA, I _B =100μA		1.5	V
V _{BE(ON)}	V_{CE} =5.0V, I_{C} =100mA		2.0	V
h _{FE}	V_{CE} =5.0V, I_{C} =10mA	10,000		
h _{FE}	V_{CE} =5.0V, I_{C} =100mA	10,000		
fT	V_{CE} =5.0V, I_{C} =10mA, f=100MHz	125		MHz
C _{ob}	V_{CB} =10V, I_E =0, f=1.0MHz		8.0	pF

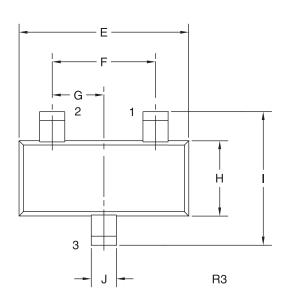
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SOT-23 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Base 2) Emitter 3) Collector

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DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	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			
Е	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			
ĺ	0.083	0.098	2.10	2.49			
J	0.014	0.020	0.35	0.50			

SOT-23 (REV: R3)

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

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

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

- Free quick 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

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

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110

Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388

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