

SURFACE MOUNT SILICON NPN DARLINGTON TRANSISTOR



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR BCV47 is a silicon NPN Darlington transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring extremely high gain.

MARKING CODE: FG

MAXIMUM RATINGS: (T _A =25°C)		SYMBOL			UNITS
Collector-Base Voltage		V _{CBO}	80	0	V
Collector-Emitter Voltage		V _{CEO}	60	0	V
Emitter-Base Voltage		V _{EBO}	10	0	V
Continuous Collector Current		۱ _C	50	00	mA
Peak Collector Current		ICM	80	0	mA
Continuous Base Current		۱ _B	10	0	mA
Power Dissipation		PD	35	50	mW
Operating and Storage Junction Temperature		T _J , T _{stg}	-65 to +150		°C
Thermal Resistance		ΘJĄ	35	57	°C/W
ELECTRICAI SYMBOL I _{CBO}	L CHARACTERISTICS: (T _A =25°C u TEST CONDITIONS V _{CB} =30V	Inless otherwise r MIN	noted) TYP	MAX 100	UNITS nA
I _{EBO}	V _{BE} =10V			100	nA
BVCEO	I _C =10mA	60			V
BVCBO	Ι _C =10μΑ	80			V
BVEBO	I _E =100nA	10			V
V _{CE} (SAT)	I _C =100mA, I _B =0.1mA			1.0	V
V _{BE(SAT)}	I _C =100mA, I _B =0.1mA			1.5	V
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	2,000			
h _{FE}	V _{CE} =5.0V, I _C =10mA	4,000			
h _{FE}	V _{CE} =5.0V, I _C =100mA	10,000			
fT	V_{CE} =5.0V, I _C =30mA, f=100MHz		220		MHz



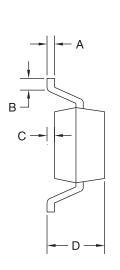
R3 (23-April 2015)

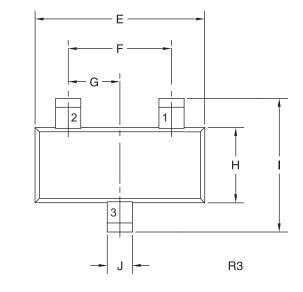




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SOT-23 CASE - MECHANICAL OUTLINE





LEAD CODE:

- 1) Base 2) Emitter
- 2) Emitter
 3) Collector
- s) Collector

MARKING CODE: FG

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)							

SOT-23 (REV: R3)

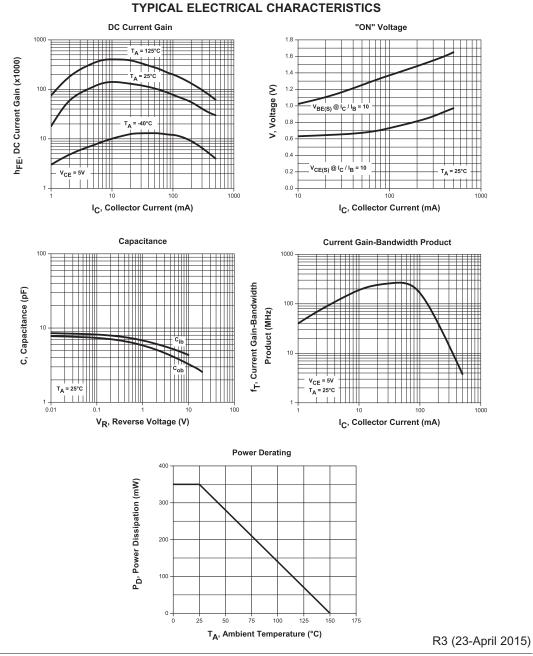
R3 (23-April 2015)

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BCV47

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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.

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- 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

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