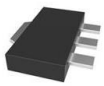
BC869-16-TP Datasheet



DiGi Electronics Part Number	BC869-16-TP-DG
Manufacturer	Micro Commercial Co
Manufacturer Product Number	BC869-16-TP
Description	Interface
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 1 A 40MHz 500 mW Surface Mount SOT-89

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
BC869-16-TP	Micro Commercial Co
Series:	Product Status:
-	Active
Transistor Type:	Current - Collector (Ic) (Max):
PNP	1 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
20 V	500mV @ 100mA, 1A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100nA (ICBO)	100 @ 500mA, 1V
Power - Max:	Frequency - Transition:
500 mW	40MHz
Operating Temperature:	Mounting Type:
-55°C ~ 150°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
TO-243AA	SOT-89
Base Product Number:	
BC869	

Environmental & Export classification

REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541.21.0095	

Micro Commercial Components

BC869

PNP Medium Power Transistors

Features

- High Current
- Low Voltage
- Halogen Free. “Green” Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

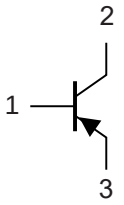
Maximum Ratings @ 25°C Unless Otherwise Specified

- Operating Junction Temperature Range: -55℃ to +150℃
- Storage Temperature Range: -55℃ to +150℃
- Thermal Resistance: 250℃/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-32	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-1	A
Peak Base Current	I_{BM}	-200	mA
Power Dissipation	P_D	0.5	W

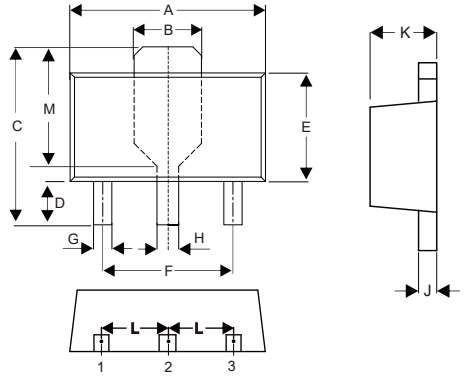
Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



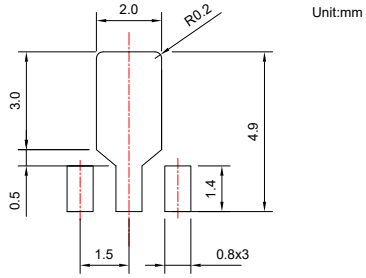
1.BASE
2.COLLECTOR
3.EMITTER

SOT-89



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.061		1.55		TYP.
C	0.154	0.171	3.91	4.35	
D	0.031	0.047	0.80	1.20	
E	0.089	0.104	2.25	2.65	
F	0.118		3.00		TYP.
G	0.013	0.020	0.33	0.52	
H	0.015	0.021	0.38	0.53	
J	0.014	0.017	0.35	0.44	
K	0.055	0.063	1.40	1.60	
L	0.059		1.50		TYP.
M	0.108		2.75		TYP.

Suggested Solder Pad Layout



Electrical Characteristics @ T_A=25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector Cutoff Current	I_{CBO}			-100	nA	V_{CB}=-25V, I_E=0
				-10	μA	V_{CB}=-25V, I_E=0, T_J=150°C
Emitter Cutoff Current	I_{EBO}			-100	nA	V_{EB}=-5V, I_C=0
DC Current Gain	$h_{FE(1)}$	50				V_{CE}=-1V, I_C=-5mA
	$h_{FE(2)}$	100		375		V_{CE}=-1V, I_C=-500mA
	$h_{FE(3)}$	60				V_{CE}=-1V, I_C=-1A
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	I_C=-1A, I_B=-0.1A
Transition Frequency	f_T	40			MHz	V_{CE}=-5V, I_C=-10mA, f=100MHz

Classification of $h_{FE(2)}$

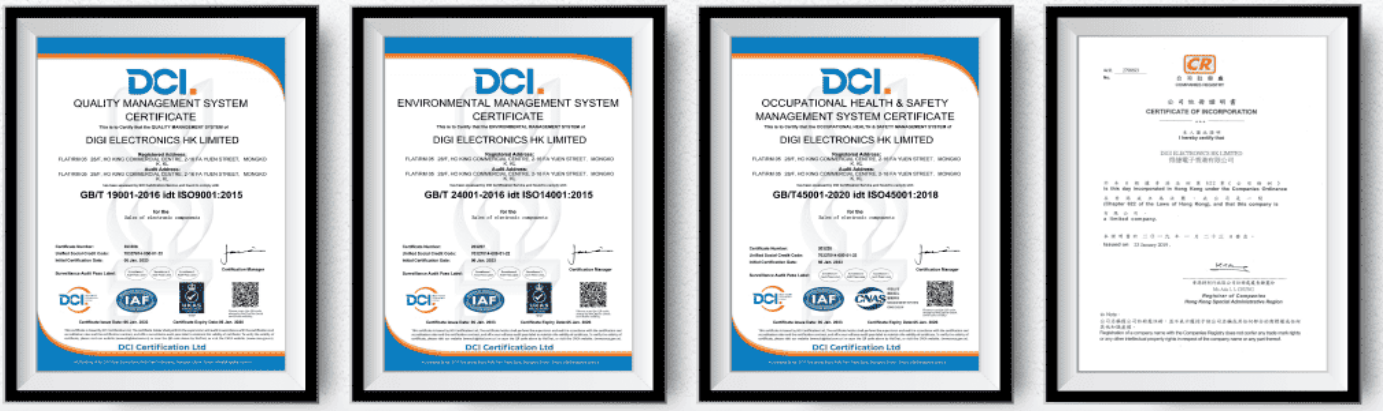
Rank	BC869	BC869-16	BC869-25
Range	100-375	100-250	160-375
Marking	CEC	CGC	CHC

Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 1Kpcs/Reel

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com



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DiGi is a global authorized distributor of electronic components.