



PART NO:

FBNL176

DRAWING NO:

FBNL176

PAGE:

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SPECIFICATION/SOURCE CONTROL DOCUMENT

DESCRIPTION: TRANSISTOR 2A 50V PNP TO-39

SPECIFICATION CONTROL

SOURCE CONTROL

CERTIFICATION OF CONFORMANCE REQUIRED

SAFETY AGENCY CONTROL

UL___

CSA___

VDE/TUV___

MANUFACTURER

MANUFACTURER PART NUMBER

FIRST:

ST MICRO

2N5323

SECOND:

MICRO COMMERCIAL COMPONENTS

2N5323

THIRD:

UNIT OF MEASURE: EACH

PACKAGING: BULK

REV	DATE	ECO	ENG	ENG	SFTY	Q.A.	DESCRIPTION
E	9/16/94	B13842				PK	
F	06/10/04	90848	FD	DG	LD	PK	Add MCC, delete Motorola

ENGINEERING NOTES:

LAMBDA CONFIDENTIAL



Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

2N5323

**PNP Silicon
 Switching Transistor**

Features

- 10 Watts Power Dissipation.
- Metal can case.

Maximum Ratings

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	50	V
V _{CBO}	Collector-Base Voltage	75	V
V _{EBO}	Emitter-Base Voltage	5.0	V
I _C	Collector Current, Continuous	2.0	A
I _B	Base Current	1.0	A
T _J	Operating Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Thermal Characteristics

Symbol	Rating	Max	Unit
P _D	Total Device Dissipation Derate above 25°C	10 0.057	W mW/°C
R _{JC}	Thermal Resistance, Junction to Case	17.5	°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

V _{(BR)CEO}	Collector-Emitter Breakdown Voltage (I _C =100mAdc, I _B =0)	50	---	Vdc
I _{CEX}	Collector Cutoff Current (V _{CE} =75Vdc, V _{EB(ON)} =1.5Vdc) (V _{CE} =45Vdc, V _{EB(ON)} =1.5Vdc, T _C =150°C)	---	0.1 5.0	mAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =5.0Vdc, I _C =0)	---	0.1	mAdc

ON CHARACTERISTICS

h _{FE}	DC Current Gain ⁽¹⁾ (V _{CE} =4.0Vdc, I _C =500mAdc)	40	250	---
V _{CE(sat)}	Collector-Emitter Saturation Voltage ⁽¹⁾ (I _C =500mAdc, I _B =50mAdc)	---	1.2	Vdc
V _{BE(ON)}	Base-Emitter On Voltage (I _C =500mAdc, V _{CE} =4.0Vdc)	---	1.4	Vdc

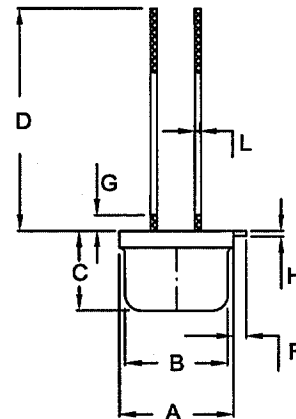
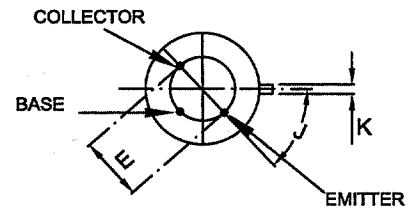
SMALL-SIGNAL CHARACTERISTICS

h _{fe}	Small-signal current gain (V _{CE} =4.0Vdc, I _C =50mAdc, f=10MHz)	5.0	---	---
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SWITCHING CHARACTERISTICS

t _{on}	Turn-On Time (V _{CC} =30Vdc, I _C =500mAdc, I _{B1} =50mAdc)	---	100	ns
t _{off}	Turn-Off Time (V _{CC} =30Vdc, I _C =500mAdc, I _{B1} =I _{B2} =50mAdc)	---	1000	ns

TO-39



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.335	.370	8.509	7.62	Φ
B	.305	.335	7.747	8.509	Φ
C	.240	.260	6.096	6.604	
D	.50	.75	12.7	19.05	
E	.200		5.08		ΦTYP
F	.029	.045	7.366	11.43	
G	----	.050	----	1.27	
H	.009	.031	0.229	7.874	
J	44°	46°	44°	46°	
K	.028	.034	0.711	0.864	
L	.016	.021	0.406	0.533	