



PRODUCT NAME : BFY51 NPN Medium Power Transistor

PRICE : Rs 49.00

SKU : RM1793



DESCRIPTION

With this product you are purchasing a genuine component. Copyrights by Robomart.com

Features

- Collector-Emitter Volt (V_{ce0}): 30V
- Collector-Base Volt (V_{cb0}): 60V
- Collector Current (I_c): 1.0A
- h_{fe} : 40-123 @ 150mA
- Power Dissipation (P_{tot}): 800mW
- Current-Gain-Bandwidth (f_{total}): 50MHz
- Type: NPN

NPN medium power transistors

BFY50; BFY51; BFY52

FEATURES

- High current (max. 1 A)
- Low voltage (max. 35 V).

APPLICATIONS

- General purpose industrial applications.

DESCRIPTION

NPN medium power transistor in a TO-39 metal package.

PINNING

PIN	DESCRIPTION
1	emitter
2	base
3	collector, connected to case

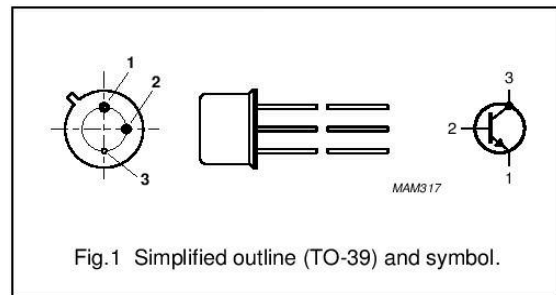


Fig.1 Simplified outline (TO-39) and symbol.

QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V _{CBO}	collector-base voltage	open emitter				
	BFY50		–	–	80	V
	BFY51		–	–	60	V
	BFY52		–	–	40	V
V _{CEO}	collector-emitter voltage	open base				
	BFY50		–	–	35	V
	BFY51		–	–	30	V
	BFY52		–	–	20	V
I _{CM}	peak collector current		–	–	1	A
P _{tot}	total power dissipation	T _{amb} ≤ 25 °C	–	–	800	mW
		T _{case} ≤ 100 °C	–	–	2.86	W
h _{FE}	DC current gain	I _C = 150 mA; V _{CE} = 10 V				
	BFY50		30	112	–	
	BFY51		40	123	–	
	BFY52		60	142	–	
f _T	transition frequency	I _C = 50 mA; V _{CE} = 10 V; f = 100 MHz				
	BFY50		60	–	–	MHz
	BFY51; BFY52		50	–	–	MHz

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LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 134).

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V _{CBO}	collector-base voltage	open emitter			
	BFY50		–	80	V
	BFY51		–	60	V
	BFY52		–	40	V
V _{CEO}	collector-emitter voltage	open base			
	BFY50		–	35	V
	BFY51		–	30	V
	BFY52		–	20	V
V _{EBO}	emitter-base voltage	open collector	–	6	V
I _C	collector current (DC)		–	1	A
I _{CM}	peak collector current		–	1	A
I _{BM}	peak base current		–	100	mA
P _{tot}	total power dissipation	T _{amb} ≤ 25 °C	–	800	mW
		T _{case} ≤ 25 °C	–	5	W
		25 °C < T _{case} < 100 °C	–	2.86	W
T _{stg}	storage temperature		–65	+150	°C
T _j	junction temperature		–	200	°C
T _{amb}	operating ambient temperature		–65	+150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
R _{th j-a}	thermal resistance from junction to ambient	in free air	220	K/W
R _{th j-c}	thermal resistance from junction to case		35	K/W

