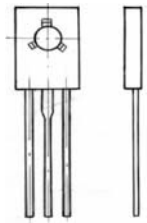
Transys Electronics LIMITED

TO-126C Plastic-Encapsulated Transistors

2SB649/2SB649A TRANSISTOR (PNP)

TO-126C



1. EMITTER
2. COLLECTOR
3. BASE

1 2 3

FEATURES

Power dissipation

P_{CM}: 1 W (Tamb=25℃)

Collector current

I_{CM}: -1.5 A

Collector-base voltage

$V_{(BR)CBO}$: -180 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA, I_E=0		-180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	2SB649 2SB649A	-120 -160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA, I_C=0		-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-160V, I_E=0				-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0				-10	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-5V, I_C=-150mA	2SB649 2SB649A	60 60		320 200	
	$h_{FE(2)}$	V_{CE}=-5V, I_C=-500mA		30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA				-1	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-150mA				-1.5	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-150mA			140		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz			27		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	B	C	D
Range	60-120	100-200	160-320
Marking			