



# TO-126 Plastic-Encapsulate Transistors

## BD435 TRANSISTOR ( NPN )

### FEATURES

Power dissipation

$P_{CM}$ : 1.25 W ( $T_{amb}=25^{\circ}C$ )

Collector current

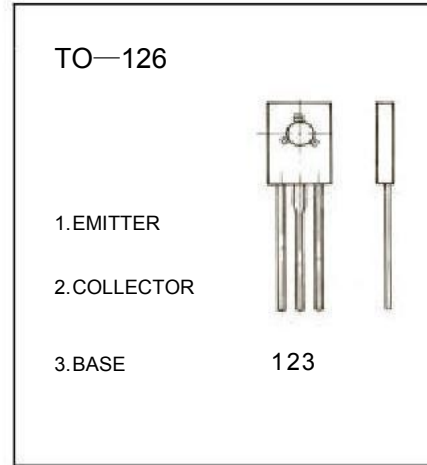
$I_{CM}$ : 4.0 A

Collector-base voltage

$V_{(BR)CBO}$ : 32 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter sustaining voltage	$V_{CEO}$	$I_C=100mA, I_E=0$	32			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=32V, I_E=0$			100	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE}=32V, I_E=0$			100	$\mu A$
<b>Emitter cut-off current</b>	$I_{EBO}$	$V_{EB}=5V, I_C=0$			1	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=500mA$	85	140		
DC current gain	$h_{FE(2)}$	$V_{CE}=5V, I_C=10mA$	40	130		
DC current gain	$h_{FE(3)}$	$V_{CE}=1V, I_C=2A$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3A, I_B=0.3A$		0.2	0.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=1V, I_C=2A$			1.1	V
Transition frequency	$f_T$	$V_{CE}=1V, I_C=250mA$	3			MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	1	2	3
Range	40-80	70-140	140-200



