

## Silicon NPN Power Transistors

2SD1348

## DESCRIPTION

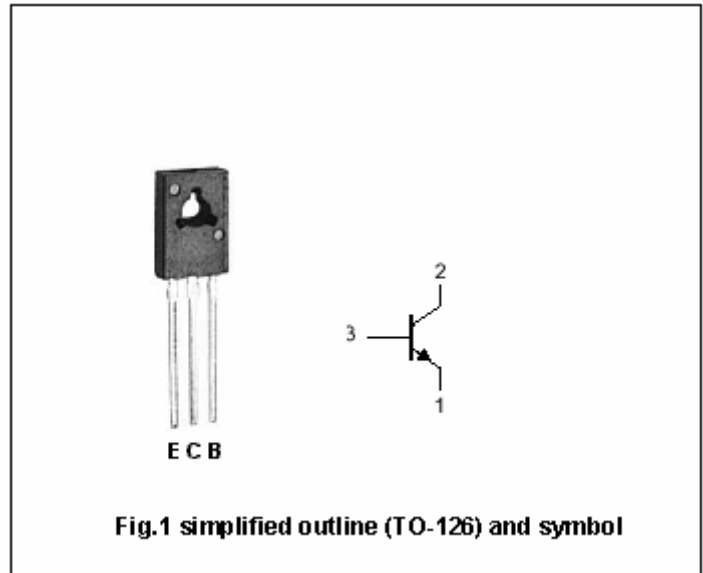
- With TO-126 package
- Complement to type 2SB986
- High current capacity

## APPLICATIONS

- Power supplies, relay drivers, lamp drivers, electrical equipment

## PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector; connected to mounting base
3	Base

Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	60	V
$V_{CEO}$	Collector-emitter voltage	Open base	50	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current		4	A
$I_{CM}$	Collector current-peak		6	A
$P_D$	Total power dissipation	$T_a=25^\circ\text{C}$	1.2	W
		$T_C=25^\circ\text{C}$	10	
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

## Silicon NPN Power Transistors

2SD1348

## CHARACTERISTICS

 $T_j=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1.0\text{mA}; R_{BE}=\infty$	50			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu\text{A}; I_C=0$	6			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\mu\text{A}; I_E=0$	60			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=2.0\text{A}; I_B=0.1\text{A}$			0.5	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=2.0\text{A}; I_B=0.1\text{A}$			1.2	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=40\text{V}; I_E=0$			1.0	mA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=4\text{V}; I_C=0$			1.0	mA
$h_{FE-1}$	DC current gain	$I_C=100\text{mA}; V_{CE}=2\text{V}$	100		560	
$h_{FE-2}$	DC current gain	$I_C=3\text{A}; V_{CE}=2\text{V}$	40			
$f_T$	Transition frequency	$I_C=50\text{mA}; V_{CE}=10\text{V}$		150		MHz
$C_{OB}$	Collector output capacitance	$f=1\text{MHz}; V_{CB}=10\text{V}$		25		pF

◆  $h_{FE-1}$  Classifications

R	S	T	U
100-200	140-280	200-400	280-560

Silicon NPN Power Transistors

2SD1348

PACKAGE OUTLINE

