

Silicon NPN Power Transistors

2SD870

DESCRIPTION

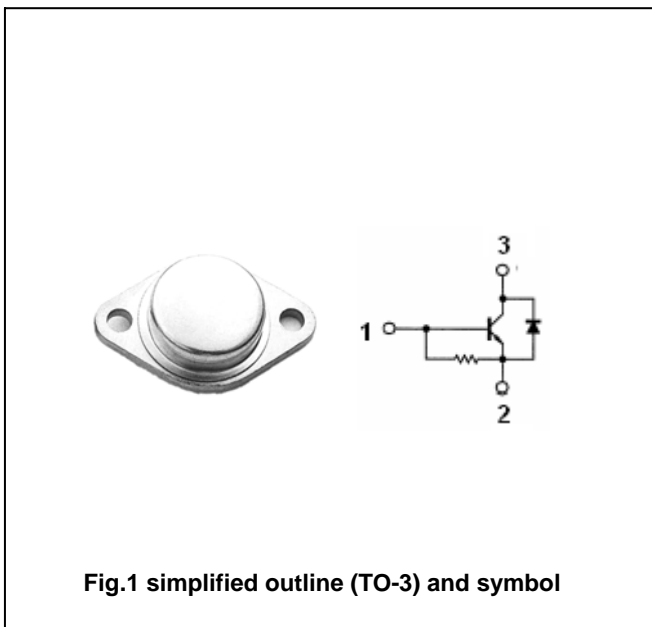
- With TO-3 package
- Built-in damper diode
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- For color TV horizontal output applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-collector voltage	Open base	600	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		5	A
I_E	Emitter current		-5	A
P_T	Total power dissipation	$T_C = 25^\circ\text{C}$	50	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =200m A; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4 A; I _B =0.8 A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4 A; I _B =0.8 A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =500V; I _E =0			10	μ A
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	8			
V _F	Diode forward voltage	I _F =5A			2.0	V
f _T	Transition frequency	I _C =0.1A ; V _{CE} =10V		3		MHz
C _{OB}	Collector output capacitance	I _E =0 ; V _{CB} =10V; f=1MHz		165		pF
t _f	Fall time	I _C =4A; I _{B1end} =0.8A			1.0	μ s

PACKAGE OUTLINE

