

Silicon NPN Power Transistors

2N5655 2N5656 2N5657

DESCRIPTION

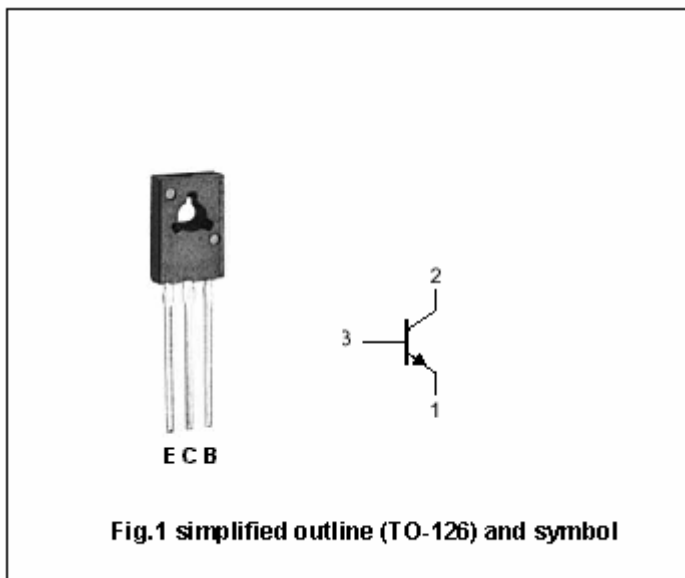
- With TO-126 package
- High breakdown voltage

APPLICATIONS

- For use in line-operated equipment such as audio output amplifiers; low-current ,high-voltage converters; and AC line relays

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N5655	275	V
		2N5656	325	
		2N5657	375	
V _{CEO}	Collector-emitter voltage	2N5655	250	V
		2N5656	300	
		2N5657	350	
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current		0.5	A
I _{CM}	Collector current-Peak		1.0	A
I _B	Base current		0.25	A
P _D	Total power dissipation	T _C =25°C	20	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	6.25	°C/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{CE0(SUS)}	Collector-emitter sustaining voltage	2N5655	250			V	
		2N5656	300				
		2N5657	350				
		I _C =0.1A; I _B =0; L=50mH					
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =100mA ; I _B =10mA			1.0	V	
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =250mA ; I _B =25mA			2.5	V	
V _{CEsat-3}	Collector-emitter saturation voltage	I _C =500mA ; I _B =100mA			10	V	
V _{BE}	Base-emitter on voltage	I _C =100mA ; V _{CE} =10V			1.0	V	
I _{CEO}	Collector cut-off current	2N5655			0.1	mA	
		2N5656	V _{CE} =150V; I _B =0				
		2N5657	V _{CE} =200V; I _B =0				
		V _{CE} =250V; I _B =0					
I _{CBO}	Collector cut-off current	2N5655			10	μA	
		2N5656	V _{CB} =275V; I _E =0				
		2N5657	V _{CB} =325V; I _E =0				
		V _{CB} =375V; I _E =0					
I _{CEX}	Collector cut-off current	V _{CE} = Rated V _{CE0} ; V _{BE(off)} =1.5V T _C =100 °C			0.1 1.0	mA	
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			10	μA	
h _{FE-1}	DC current gain	I _C =50mA ; V _{CE} =10V	25				
h _{FE-2}	DC current gain	I _C =100mA ; V _{CE} =10V	30		250		
h _{FE-3}	DC current gain	I _C =250mA ; V _{CE} =10V	15				
h _{FE-4}	DC current gain	I _C =500mA ; V _{CE} =10V	5				
f _T	Transition frequency	I _C =50mA ; V _{CE} =10V; f=10MHz	10			MHz	
C _{OB}	Output capacitance	f=100kHz ; V _{CB} =10V; I _E =0			25	pF	

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PACKAGE OUTLINE

