

Silicon NPN Power Transistors

2SD1274 2SD1274A 2SD1274B

DESCRIPTION

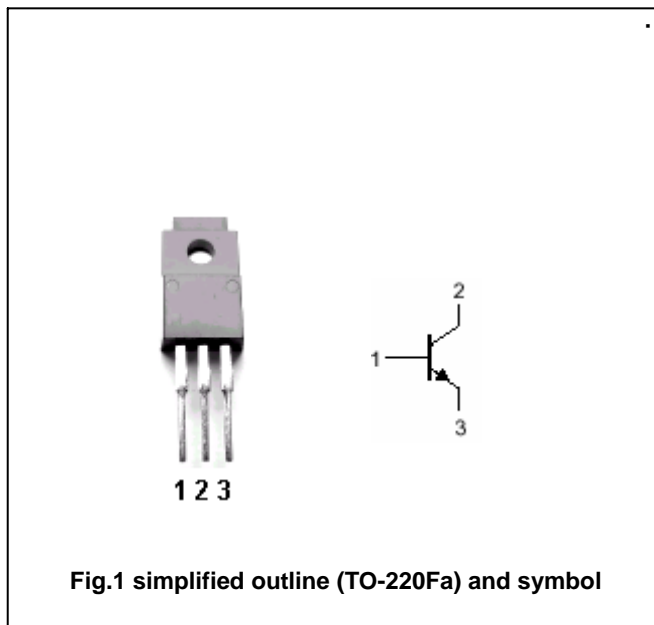
- With TO-220Fa package
- High  $V_{CBO}$
- High speed switching

APPLICATIONS

- Power amplifier applicaitons

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings ( $T_a=25$  )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	2SD1274	150	V
		2SD1274A	200	
		2SD1274B	250	
$V_{CEO}$	Collector-emitter voltage	Open base	80	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current (DC)		5	A
$P_C$	Collector power dissipation	$T_C=25$	40	W
		$T_a=25$	2	
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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**CHARACTERISTICS**T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =0.2A, L=25mH	80			V	
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA, I <sub>C</sub> =0	6			V	
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =5A; I <sub>B</sub> =1A			1.6	V	
V <sub>BE</sub>	Base-emitter voltage	I <sub>C</sub> =5A; V <sub>CE</sub> =4V			1.5	V	
I <sub>CBO</sub>	Collector cut-off current	2SD1274			1	mA	
		2SD1274A					V <sub>CB</sub> =150V; I <sub>E</sub> =0
		2SD1274B					V <sub>CB</sub> =200V; I <sub>E</sub> =0
	2SD1274B	V <sub>CB</sub> =250V; I <sub>E</sub> =0					
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			50	μA	
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =5A; V <sub>CE</sub> =4V	14				
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A; V <sub>CE</sub> =10V		40		MHz	
t <sub>f</sub>	Fall time	I <sub>C</sub> =5A; I <sub>B1</sub> =0.8A V <sub>EB</sub> =-5V			1.0	μs	

PACKAGE OUTLINE

