



PRODUCT DATA SHEET



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Datasheet



Resources

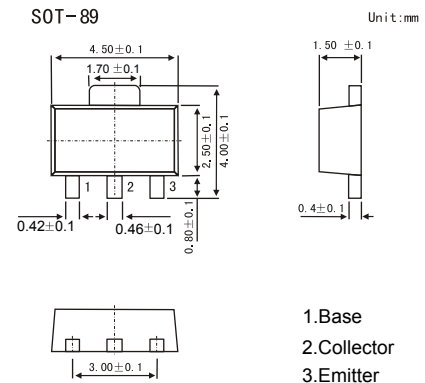


Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

■ Features

- Low collector-to-emitter saturation voltage.
- Large current capacity and wide ASO.
- Fast switching speed.


■ Absolute Maximum Ratings Ta = 25°C

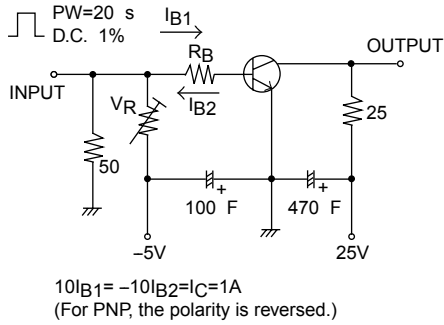
Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	60	V
Collector - Emitter Voltage	V _{CE0}	50	
Emitter - Base Voltage	V _{EB0}	6	
Collector Current - Continuous	I _C	3	A
Collector Current - Pulse	I _{CP}	6	
Collector Power Dissipation (Note.1)	P _C	0.5	W
		1.5	
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

Note.1: Mounted on ceramic board (250mm² × 0.8mm)

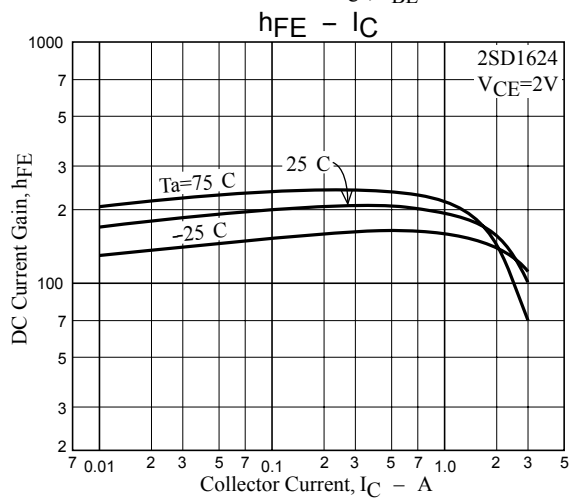
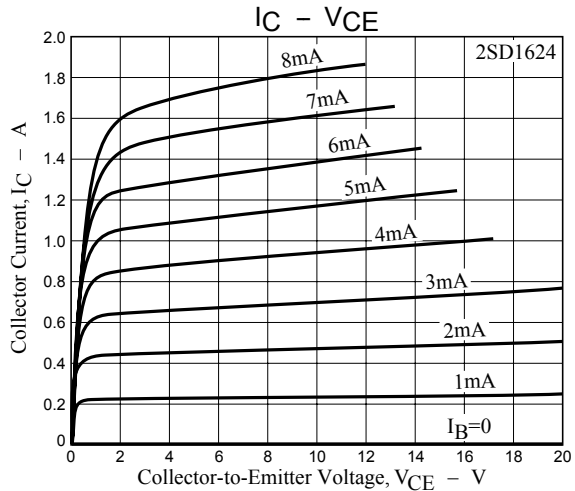
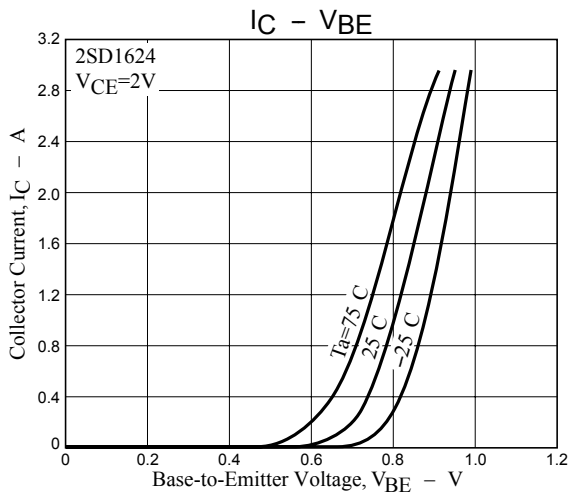
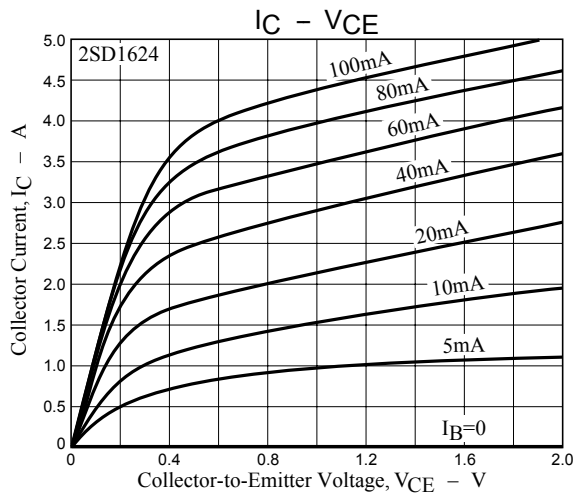
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 100 uA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CE0}	I _C = 1 mA, R _{BE} = ∞	50			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 uA, I _C = 0	6			
Collector-base cut-off current	I _{CB0}	V _{CB} = 50 V, I _E = 0			1	uA
Emitter cut-off current	I _{EB0}	V _{EB} = 4V, I _C =0			1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =2 A, I _B =100 mA		0.19	0.5	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =2 A, I _B =100 mA			1.2	
DC current gain	h _{FE}	V _{CE} = 2V, I _C = 100 mA	100		560	
		V _{CE} = 2V, I _C = 3 A	35			
Turn-ON Time	t _{on}	See specified Test Circuit.		70		ns
Storage Time	t _{stg}			650		
Fall Time	t _f			35		
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz		25		pF
Transition frequency	f _T	V _{CE} = 10V, I _C = 50mA		150		MHz

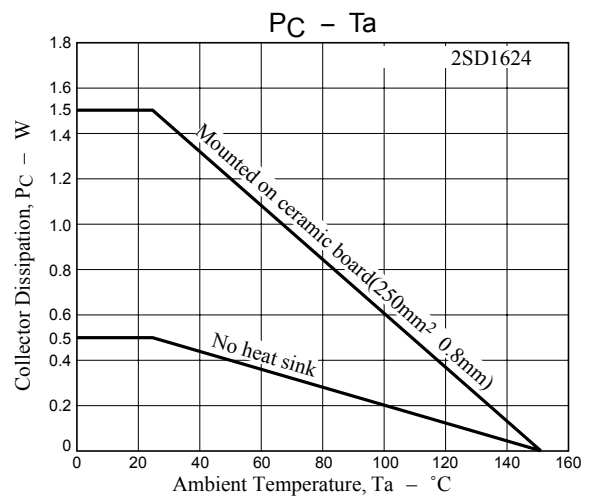
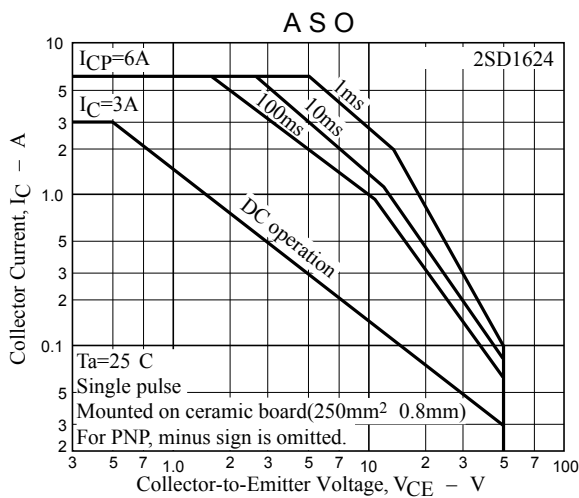
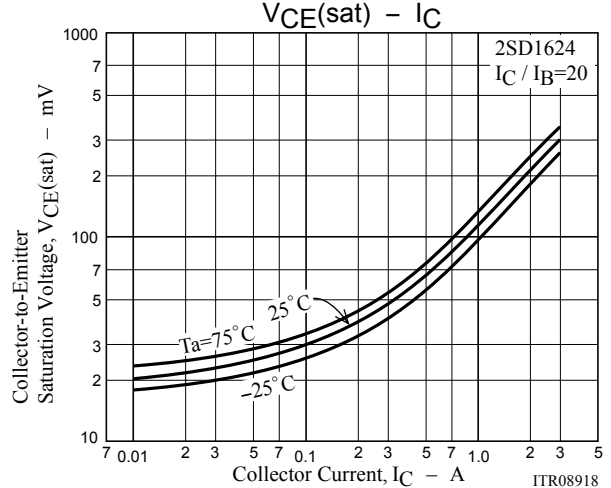
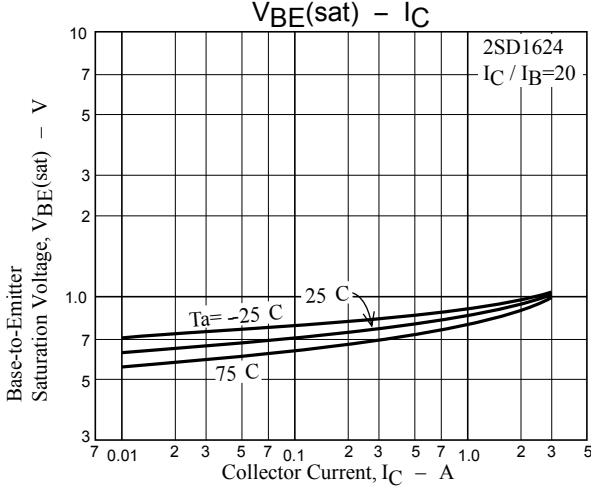
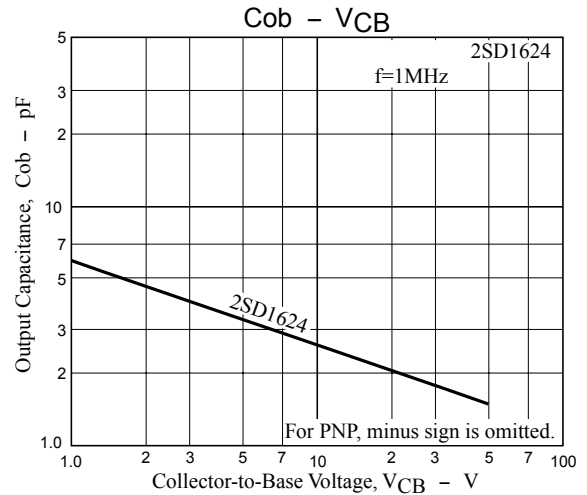
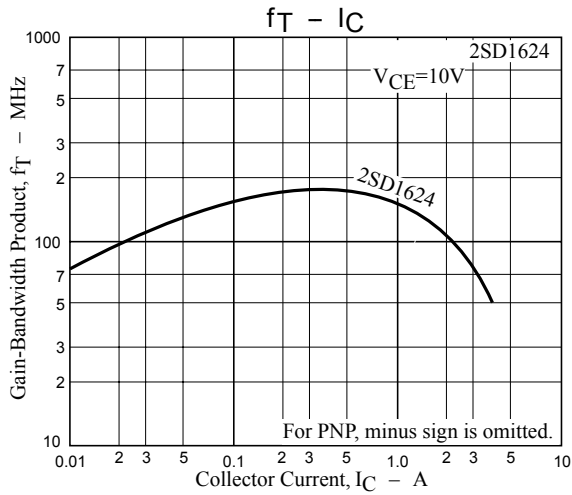
Switching Time Test Circuit



Typical Characteristics



■ Typical Characteristics



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