

2SC5270, 2SC5270A

Silicon NPN triple diffusion mesa type

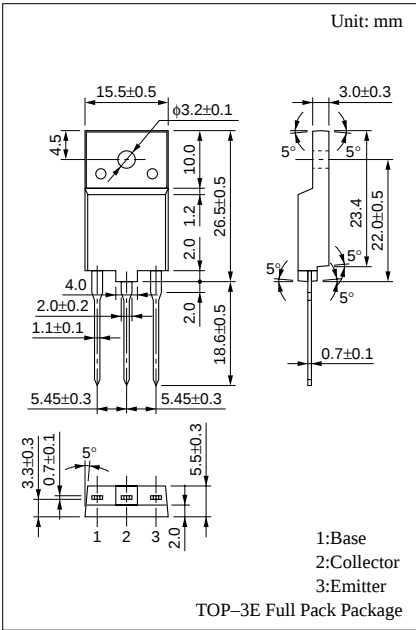
For horizontal deflection output

Features

- High breakdown voltage, and high reliability through the use of a glass passivation layer
- High-speed switching
- Wide area of safe operation (ASO)

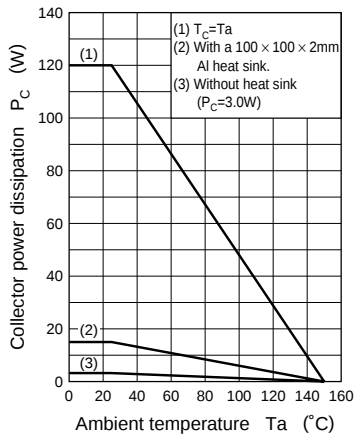
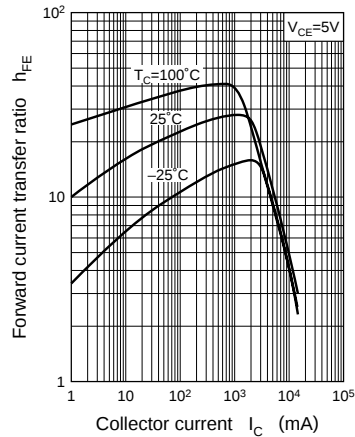
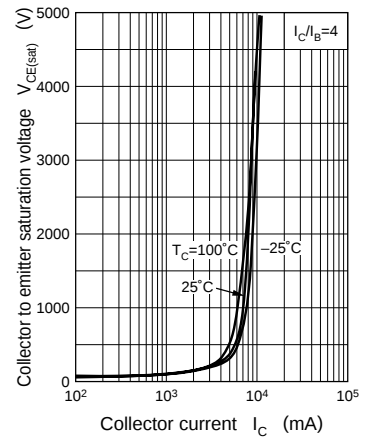
Absolute Maximum Ratings (T_C=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	1500	V
Collector to base voltage	V _{CBO}	1600	V
Collector to base voltage	V _{CES}	1500	V
Collector to base voltage	V _{CES}	1600	V
Collector to emitter voltage	V _{CEO}	600	V
Emitter to base voltage	V _{EBO}	5	V
Peak collector current	I _{CP}	20	A
Collector current	I _C	12	A
Base current	I _B	8	A
Collector power dissipation	P _C	120	W
Collector power dissipation	P _C	3	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

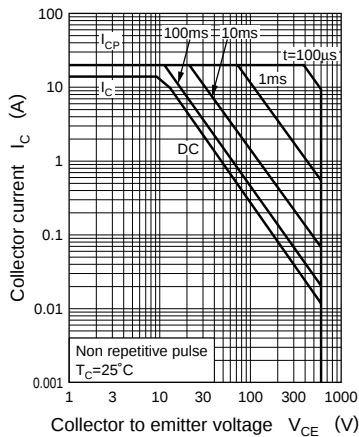


Electrical Characteristics (T_C=25°C)

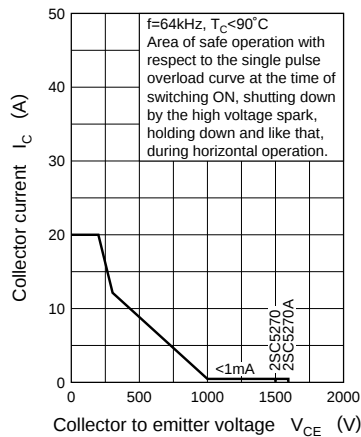
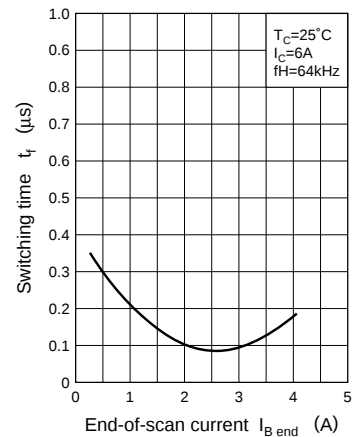
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	2SC5270	V _{CB} = 1000V, I _E = 0			50	μA
	2SC5270A				50	μA
	2SC5270	V _{CB} = 1500V, I _E = 0			1	mA
	2SC5270A				1	mA
Emitter cutoff current	I _{EBO}	V _{EB} = 5V, I _C = 0			50	μA
Forward current transfer ratio	h _{FE}	V _{CE} = 5V, I _C = 6A	5		12	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 6A, I _B = 1.5A			3	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 6A, I _B = 1.5A			1.5	V
Transition frequency	f _T	V _{CE} = 10V, I _C = 0.1A, f = 0.5MHz		3		MHz
Storage time	t _{stg}	I _C = 6A, I _{B1} = 1.5A, I _{B2} = -3A		1.5	2.5	μs
Fall time	t _f			0.12	0.2	μs

$P_C - T_a$  $h_{FE} - I_C$  $V_{CE(sat)} - I_C$ 

Area of safe operation (ASO)



Area of safe operation, horizontal operation ASO

 $t_f - I_B$  $t_{stg} - I_B$ 