

2SC5243

Silicon NPN triple diffusion mesa type

For horizontal deflection output

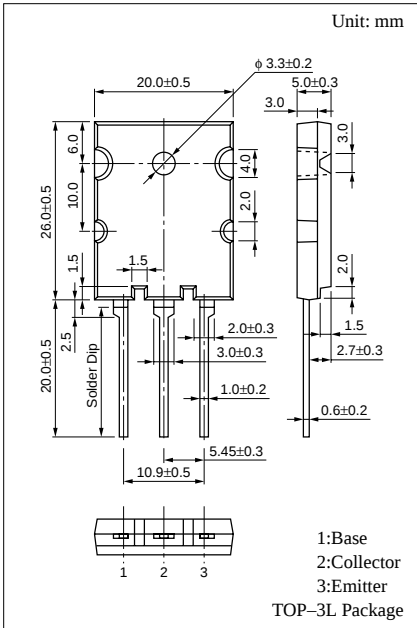
■ Features

- 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)

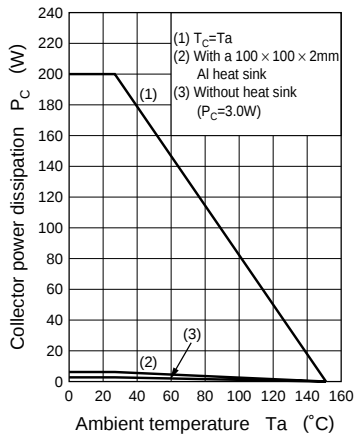
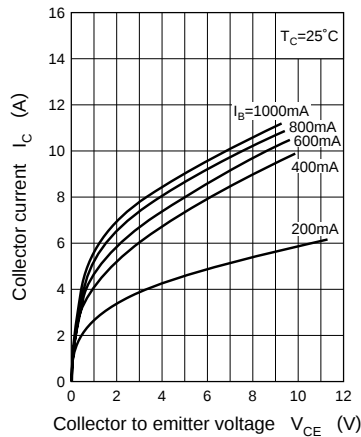
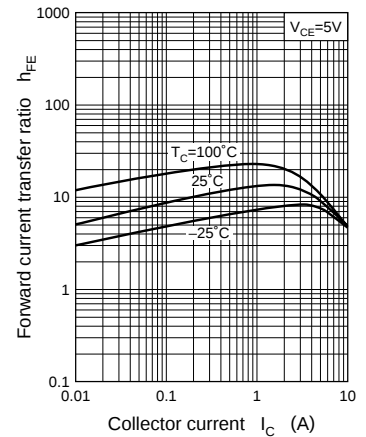
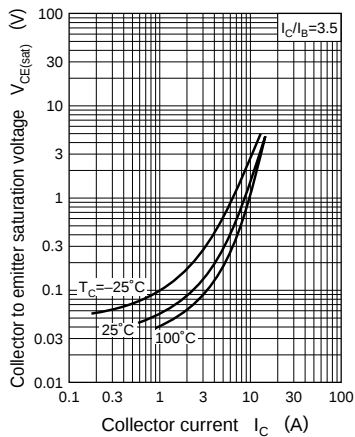
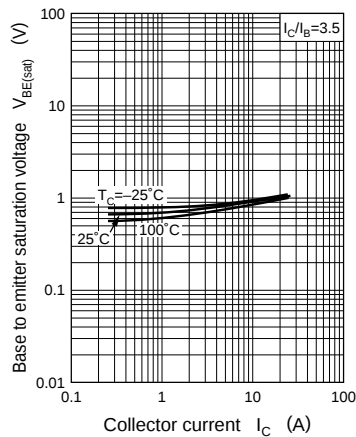
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	1700	V
Collector to emitter voltage	V _{CES}	1700	V
Emitter to base voltage	V _{EBO}	6	V
Collector current	I _C	15	A
Peak collector current	I _{CP} *	30	A
Peak base current	I _{BP}	10	A
Collector power dissipation	P _C	200	W
		3.5	
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

*Non-repetitive peak

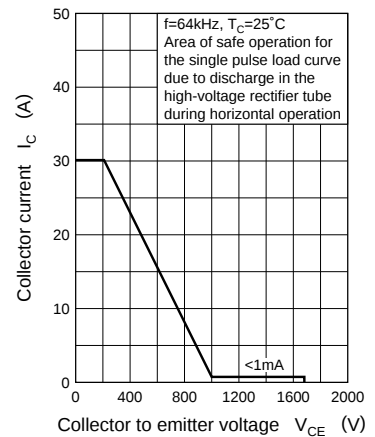


■ Electrical Characteristics (T_C=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 1700V, I _E = 0			1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = 5V, I _C = 0			50	μA
Forward current transfer ratio	h _{FE}	V _{CE} = 5V, I _C = 10A	5		12	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10A, I _B = 2.8A			3	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 10A, I _B = 2.8A			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 = 12A, I _{B1} = 2.4A, I _{B2} = -4.8A, Resistance loaded		1.5	2.5	μs
Fall time	t _f			0.12	0.2	μs

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

Area of safe operation, horizontal operation ASO

 $R_{th(t)} - t$ 