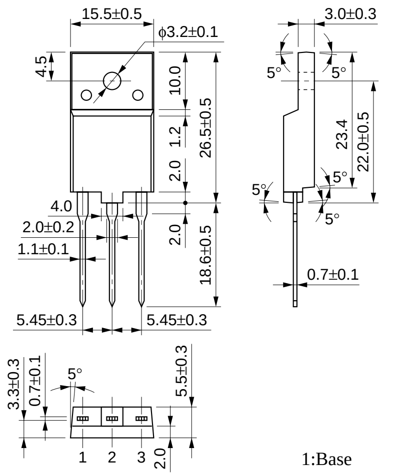
2SC5517

Silicon NPN triple diffusion mesa type

For horizontal deflection output

Unit: mm



1:Base
2:Collector
3:Emitter
TOP–3E Full Pack Package

■ Features

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

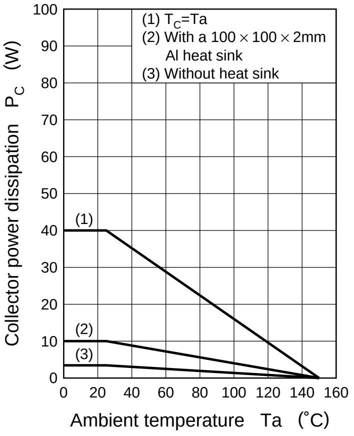
■ Absolute Maximum Ratings (T_C=25˚C)

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}	5	V
Peak collector current		I_{CP}	12	A
Collector current		I_C	6	A
Base current		I_B	3	A
Collector power dissipation	T_C=25°C	P_C	40	W
	Ta=25°C		3	
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	I_{CBO}	V_{CB} = 1000V, I_E = 0			50	µA
		V_{CB} = 1700V, I_E = 0			1	mA
Emitter to base voltage	V_{EBO}	I_E = 500mA, I_C = 0	5			V
Forward current transfer ratio	h_{FE}	V_{CE} = 5V, I_C = 4.5A	5		10	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 4.5A, I_B = 0.9A			3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = 4.5A, I_B = 0.9A			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 = 4.5A, I_{B1} = 0.9A, I_{B2} = –1.8A			5.0	µs
Fall time	t_f				0.5	µs
Diode forward voltage	V_F	I_F = 4.5A			–2	V

P_C — Ta



Area of safe operation, horizontal operation ASO