

XP05555 (XP5555)

Silicon NPN epitaxial planer transistor

For high speed switching

■ Features

- Two elements incorporated into one package.
- Reduction of the mounting area and assembly cost by one half.

■ Basic Part Number of Element

- 2SC4782 \times 2 elements

■ Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit
Rating of element	Collector to base voltage	V_{CBO}	25	V
	Collector to emitter voltage	V_{CES}	20	V
	Emitter to base voltage	V_{EBO}	5	V
	Collector current	I_C	200	mA
	Peak collector current	I_{CP}	300	mA
Overall	Total power dissipation	P_T	150	mW
	Junction temperature	T_j	150	°C
	Storage temperature	T_{stg}	-55 to +150	°C

Unit: mm

Top View Dimensions:

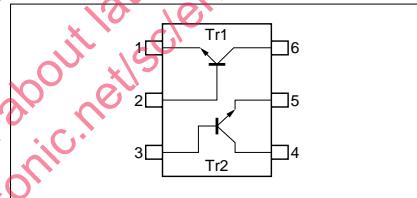
- Width: 0.24 ± 0.05
- Height: 0.425
- Lead Spacing: 1.25 ± 0.10
- Lead Length: 2.1 ± 0.1
- Lead Width: 0.125 ± 0.02
- Lead Angle: 5°
- Lead Spacing: 0.2 ± 0.1
- Lead Length: 0.65 ± 0.05
- Lead Width: 0.65 ± 0.05
- Lead Spacing: 1.3 ± 0.1
- Lead Length: 2.0 ± 0.1
- Lead Width: 0.1 ± 0.01
- Lead Spacing: 0.9 ± 0.2
- Lead Length: 0.9 ± 0.2
- Lead Width: 0.1 ± 0.01
- Lead Spacing: 0.1 ± 0.01

Bottom View Dimensions:

- Width: 0.24 ± 0.05
- Height: 0.425
- Lead Spacing: 1.25 ± 0.10
- Lead Length: 2.1 ± 0.1
- Lead Width: 0.125 ± 0.02
- Lead Angle: 5°
- Lead Spacing: 0.2 ± 0.1
- Lead Length: 0.65 ± 0.05
- Lead Width: 0.65 ± 0.05
- Lead Spacing: 1.3 ± 0.1
- Lead Length: 2.0 ± 0.1
- Lead Width: 0.1 ± 0.01
- Lead Spacing: 0.9 ± 0.2
- Lead Length: 0.9 ± 0.2
- Lead Width: 0.1 ± 0.01
- Lead Spacing: 0.1 ± 0.01

Marking Symbol: EO

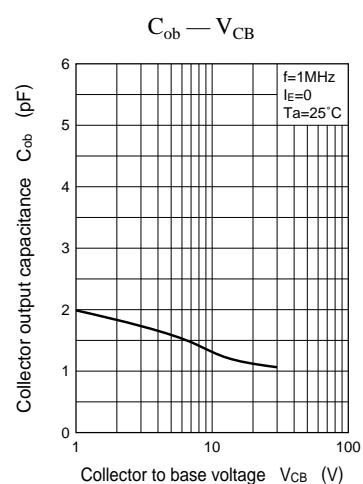
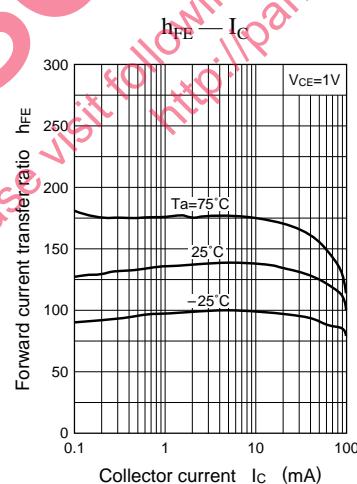
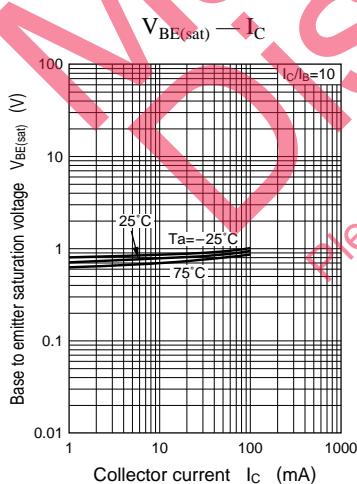
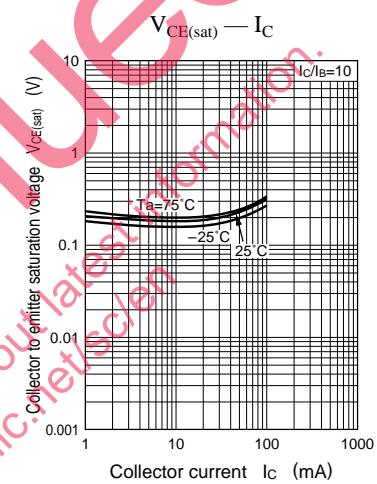
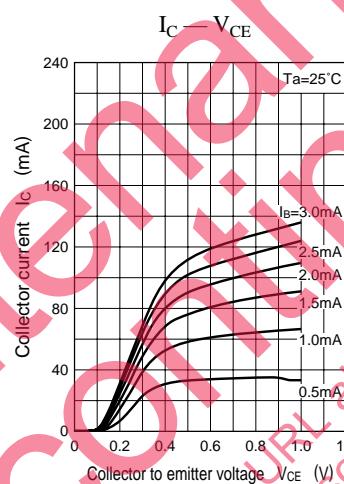
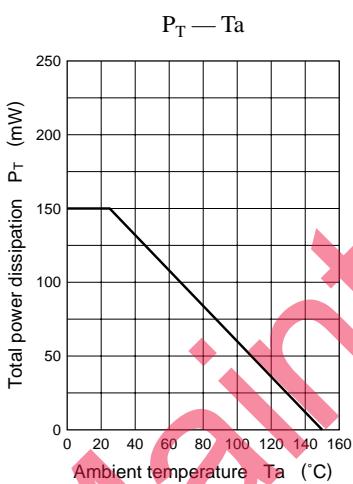
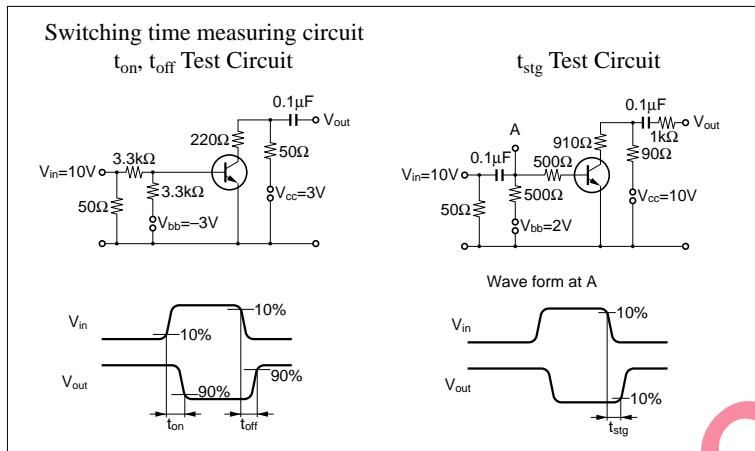
Internal Connection



■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 10V, I_E = 0$			0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			0.1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 1V, I_C = 10mA$	40		200	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$		0.17	0.25	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 1mA$		0.76	1.0	V
Transition frequency	f_T	$V_{CB} = 10V, I_E = -10mA, f = 200MHz$	200	500	MHz	
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	2	4	pF	
Turn-on time	t_{on}	*1	17		ns	
Turn-off time	t_{off}		15		ns	
Storage time	t_{stg}		7		ns	

*1 Switching time measuring circuit



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