

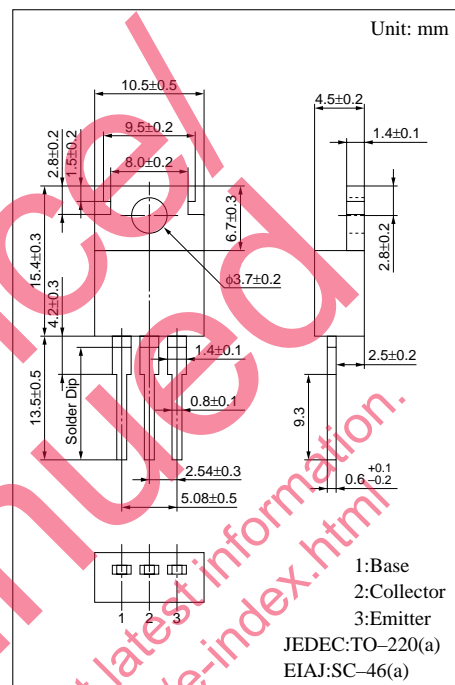
Silicon PNP epitaxial planar type

■ Features

- High-speed switching
- High collector to base voltage V_{CBO}
- Wide area of safe operation (ASO)
- Satisfactory linearity of forward current transfer ratio h_{FE}

Absolute Maximum Ratings ($T_C=25^{\circ}\text{C}$)

Parameter		Symbol	Ratings	Unit
Collector to base voltage		V_{CBO}	−400	V
Collector to emitter voltage		V_{CEO}	−400	V
Emitter to base voltage		V_{EBO}	−7	V
Peak collector current		I_{CP}	−8	A
Collector current		I_C	−5	A
Collector power dissipation	$T_C=25^{\circ}\text{C}$	P_C	40	W
	$T_a=25^{\circ}\text{C}$		1.4	
Junction temperature		T_j	150	$^{\circ}\text{C}$
Storage temperature		T_{stg}	−55 to +150	$^{\circ}\text{C}$

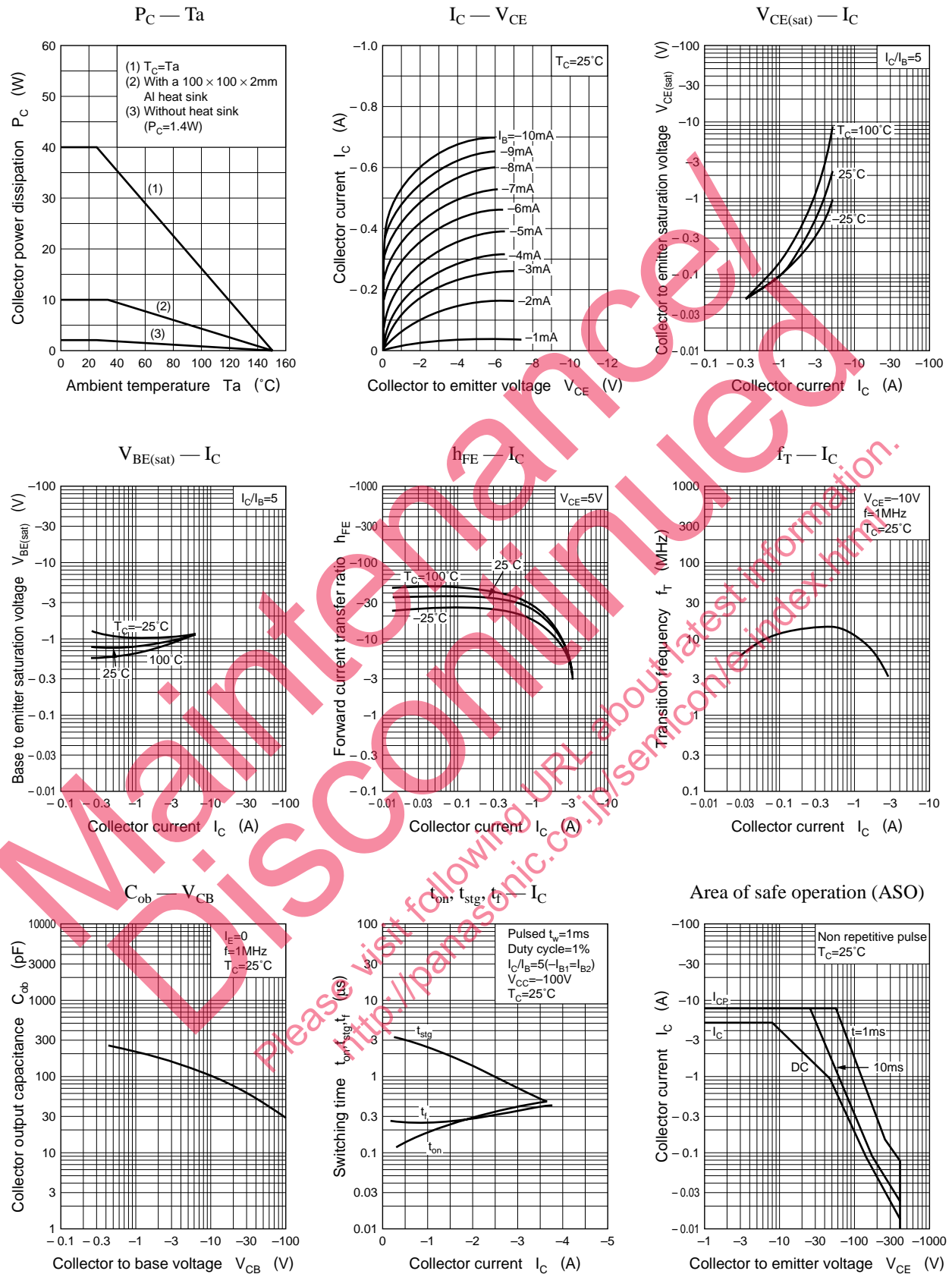


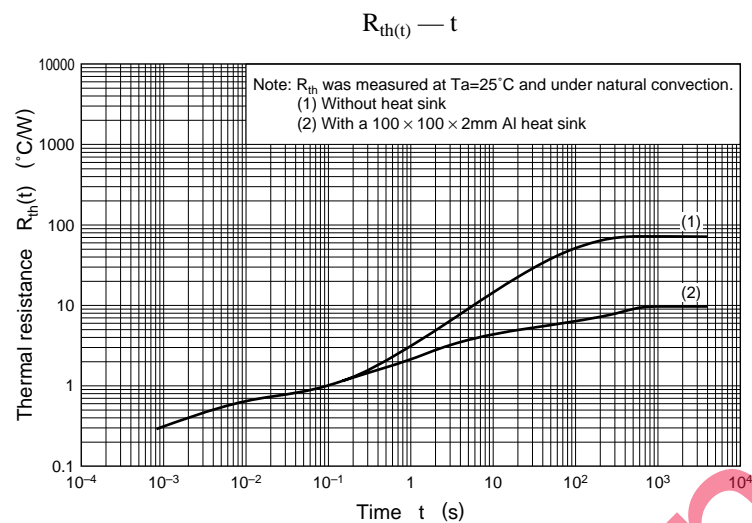
■ Electrical Characteristics (T_C=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -400V, I_E = 0$			-100	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -7V, I_C = 0$			-100	μA
Collector to emitter voltage	V_{CEO}	$I_C = -10mA, I_B = 0$	-400			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -5V, I_C = -0.5A$	20		100	
	h_{FE2}	$V_{CE} = -5V, I_C = -2A$	8			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.4A$			-1.0	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2A, I_B = -0.4A$			-1.5	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -0.5A, f = 1MHz$		15		MHz
Turn-on time	t_{on}	$I_C = -2A,$ $I_{B1} = -0.4A, I_{B2} = 0.4A,$ $V_{CC} = -100V$			1.0	μs
Storage time	t_{stg}				2.5	μs
Fall time	t_f				1.0	μs

*h_{FE1} Rank classification

Rank	Q	P
h_{FE1}	20 to 60	50 to 100





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