2SC4111

Silicon NPN triple diffusion planar type

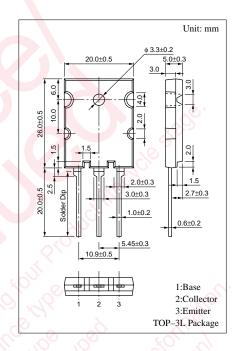
For horizontal deflection output

Features

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

Absolute Maximum Ratings (T_C=25°C)

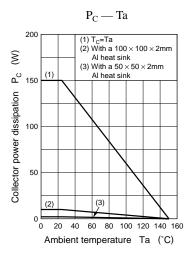
Parameter	Symbol Ratings		Unit	
Collector to base voltage	V_{CBO}	1500	V	
C-11	V _{CES}	1500	V	
Collector to emitter voltage	V _{CEO}	700	V	
Emitter to base voltage	V_{EBO}	7	V	
Peak collector current	I_{CP}	22	A	
Collector current	$I_{\rm C}$	10	A	
Base current	I_B	3.5	A	
Collector power T _C =25°C	D	150	c _w	
dissipation Ta=25°C	P_{C}	3.5	Now Ne	
Junction temperature	$T_{\rm j}$	150	°C	
Storage temperature	$T_{ m stg}$	-55 to +150	°C √0	

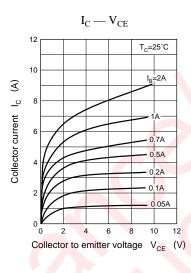


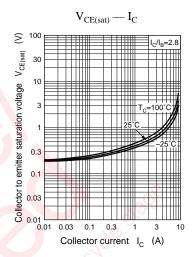
Electrical Characteristics (T_C=25°C)

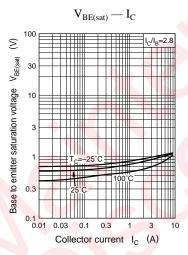
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 750V, I_E = 0$	O		10	μΑ
		$V_{CB} = 1500V, I_E = 0$			1	mA
Emitter to base voltage	V _{EBO}	$I_C = 1 \text{mA}, I_B = 0$	7			V
Forward current transfer ratio	h _{FE1}	$V_{CE} = 5V$, $I_C = 1A$	5			
	h _{FE2}	$V_{CE} = 5V, I_C = 7A$	3		8	
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = 7A, I_B = 2.5A$			5	V
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = 7A, I_B = 2.5A$			1.5	V
Transition frequency	f_T	$V_{CE} = 10V, I_{C} = 1A, f = 0.5MHz$		2		MHz
Storage time	t _{stg}	$I_{C} = 6A, L_{leak} = 5\mu H,$			12	μs
Fall time	$t_{\rm f}$	$I_{B1} = 1.7A, I_{B2} = -1.7A$			0.6	μs

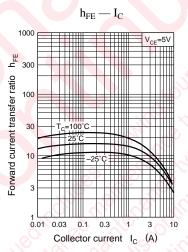
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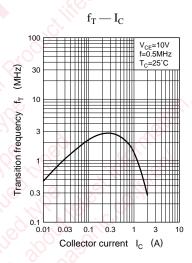


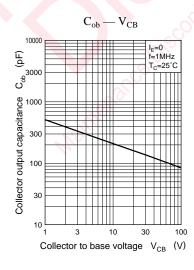


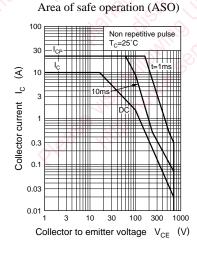


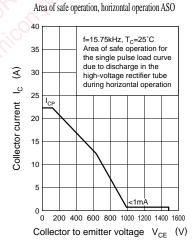






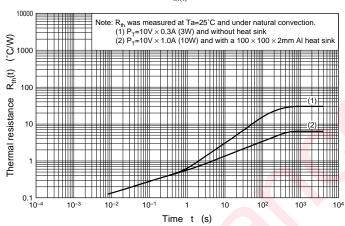






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