

2SD0602, 2SD0602A (2SD602, 2SD602A)

Silicon NPN epitaxial planer type

For general amplification

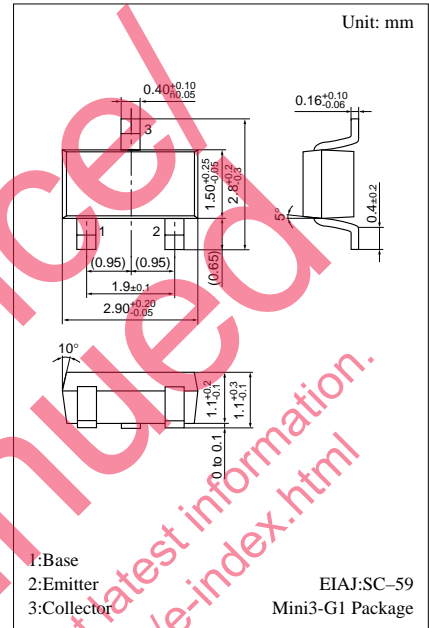
Complementary to 2SB710 (2SB710) and 2SB710A (2SB710A)

■ Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$.
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rated	Unit
Collector to base voltage	V _{CBO}	30	V
2SD0602			
2SD0602A	60		
Collector to emitter voltage	V _{CEO}	25	V
2SD0602			
2SD0602A	50		
Emitter to base voltage	V _{EBO}	5	V
Peak collector current	I _{CP}	1	A
Collector current	I _C	500	mA
Collector power dissipation	P _C	200	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C



Marking symbol : W(2SD0602)
X(2SD0602A)

■ Electrical Characteristics (Ta=25°C)

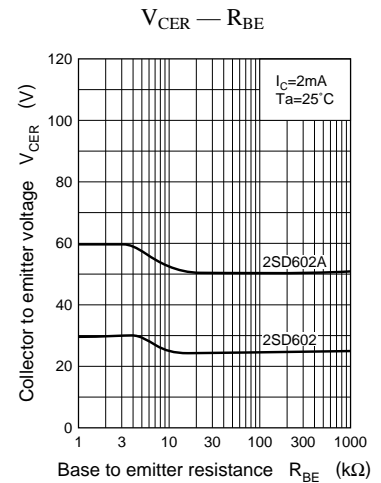
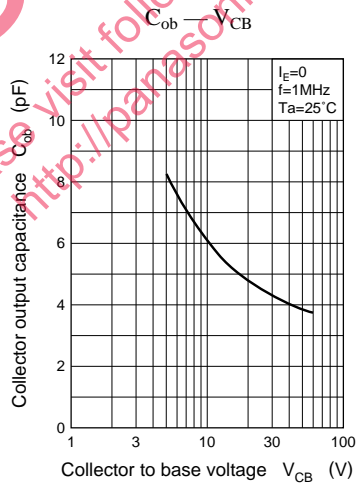
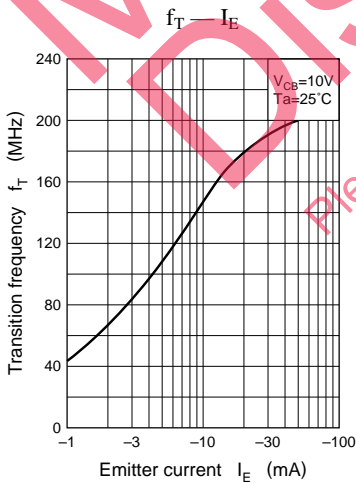
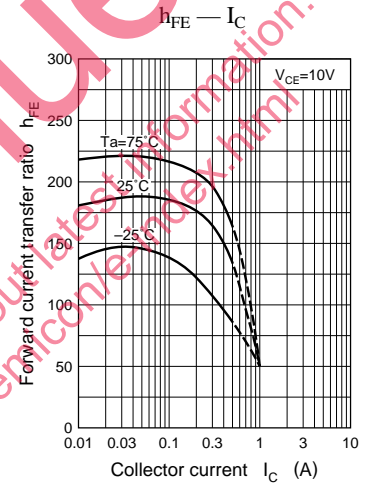
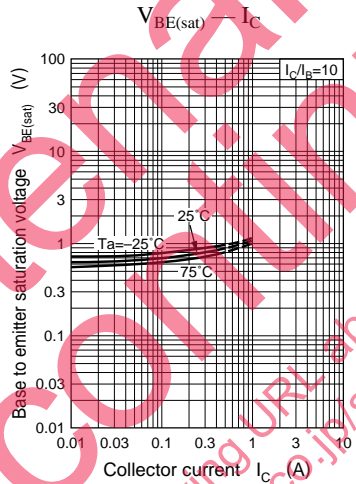
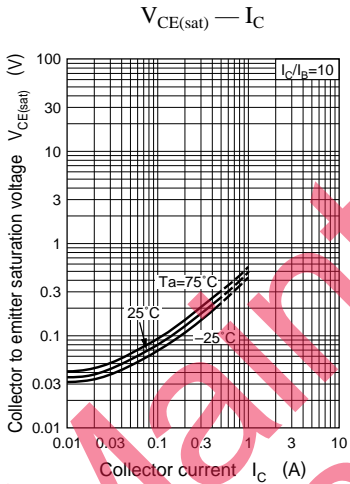
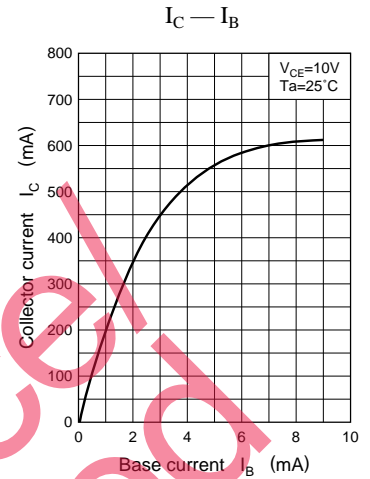
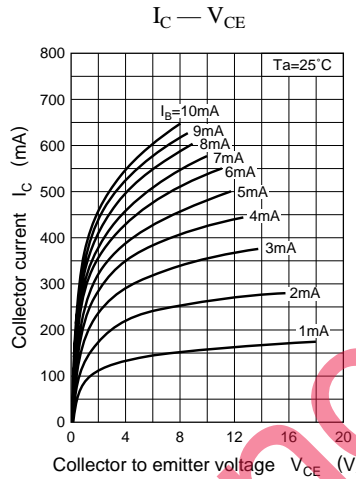
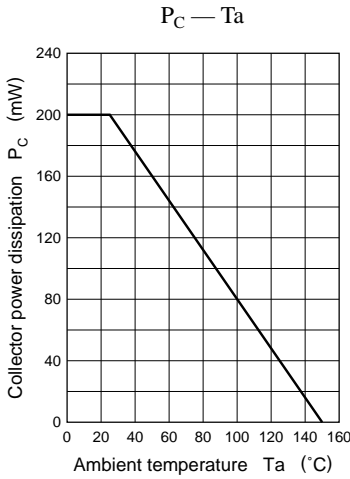
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 20V, I _E = 0			0.1	μA
Collector to base voltage	2SD0602	I _C = 10μA, I _E = 0	30			V
	2SD0602A		60			
Collector to emitter voltage	2SD0602	V _{CEO} I _C = 10mA, I _B = 0	25			V
	2SD0602A		50			
Emitter to base voltage	V _{EBO}	I _E = 10μA, I _C = 0	5			V
Forward current transfer ratio	h _{FE1} ^{*1}	V _{CE} = 10V, I _C = 150mA ^{*2}	85	160	340	
	h _{FE2}	V _{CE} = 10V, I _C = 500mA ^{*2}	40			
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 300mA, I _B = 30mA ^{*2}		0.35	0.6	V
Transition frequency	f _T	V _{CB} = 10V, I _E = -50mA ^{*2} , f = 200MHz		200		MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz		6	15	pF

^{*2} Pulse measurement

^{*1}h_{FE1} Rank classification

Rank	Q	R	S
h _{FE1}	85 ~ 170	120 ~ 240	170 ~ 340
Marking Symbol	2SD0602 WQ	WR	WS
	2SD0602A XQ	XR	XS

Note.) The Part numbers in the Parenthesis show conventional part number.



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