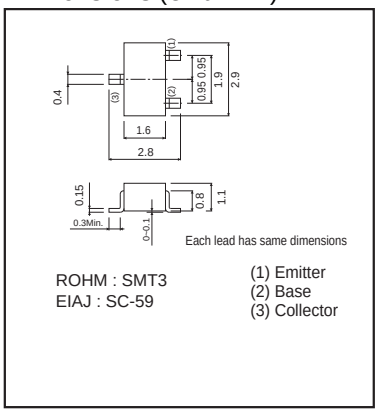
Chroma amplifier transistor (300V, 0.1A)

2SC4061K

●Features

1) High breakdown voltage. (BV_{CEO}=300V)
2) Low collector output capacitance.
   (Typ. 3pF at V_{CB}=30V)
3) Ideal for chroma circuit.

●Dimensions (Unit : mm)



ROHM : SMT3
EIAJ : SC-59

(1) Emitter
(2) Base
(3) Collector

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	300	V
Collector-emitter voltage	V_{CEO}	300	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C	0.2	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−55 to +150	°C

●Packaging specifications and h_{FE}

Type	2SC4061K
Package	SMT3
h_{FE}	NP
Marking	AN*
Code	T146
Basic ordering unit (pieces)	3000

* Denotes h_{FE}

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	300	–	–	V	I_C=50μA
Collector-emitter breakdown voltage	BV_{CEO}	300	–	–	V	I_C=100μA
Emitter-base breakdown voltage	BV_{EBO}	5	–	–	V	I_E=50μA
Collector cutoff current	I_{CBO}	–	–	0.5	μA	V_{CB}=200V
Emitter cutoff current	I_{EBO}	–	–	0.5	μA	V_{EB}=4V
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	–	2	V	I_C/I_B=50mA/5mA
DC current transfer ratio	h_{FE}	56	–	120	–	V_{CE}/I_C=10V/10mA
Gain bandwidth product	f_T	50	100	–	MHz	V_{CE}=30V, I_E=−10mA, f=30MHz
Collector output capacitance	Cob	–	3	–	pF	V_{CB}=30V, I_E=0A, f=1MHz

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●Electrical characteristics curves

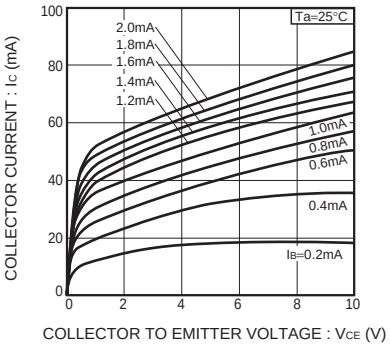

Fig.1 Ground emitter output characteristics (I)

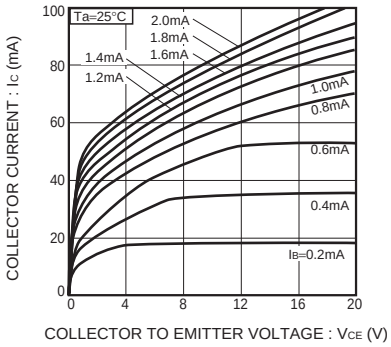

Fig.2 Ground emitter output characteristics (II)

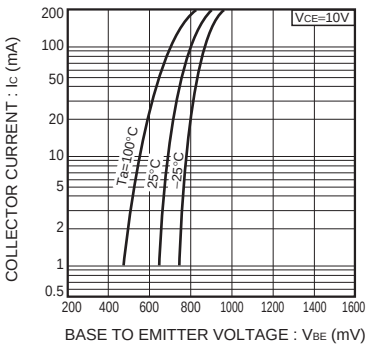

Fig.3 Ground emitter propagation characteristics

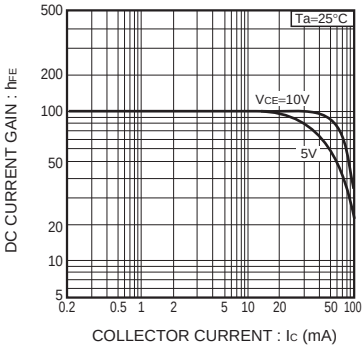

Fig.4 DC current gain vs. collector current (I)

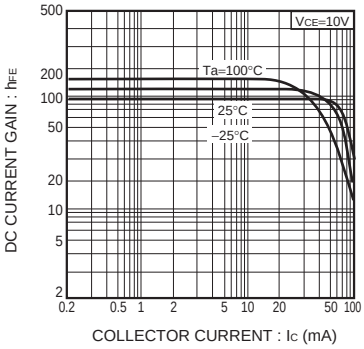

Fig.5 DC current gain vs. collector current (II)

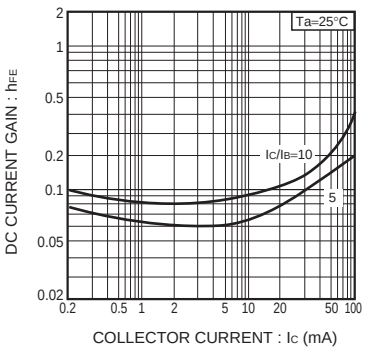

Fig.6 Collector-emitter saturation voltage vs. collector current

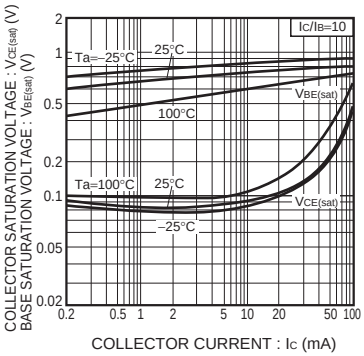

Fig.7 Collector-emitter saturation voltage Base-emitter saturation voltage vs. collector current

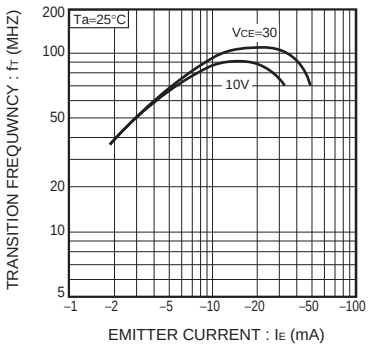

Fig.8 Gain bandwidth product vs. emitter current

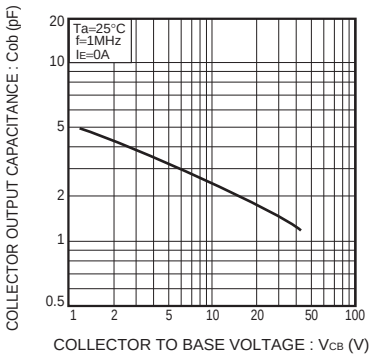

Fig.9 Collector output capacitance vs. collector-base voltage

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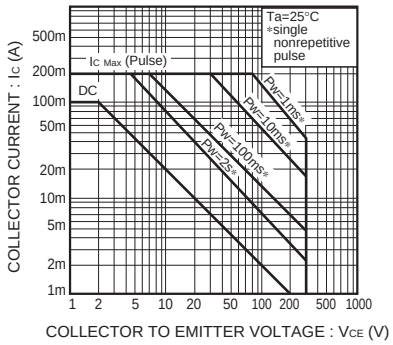

Fig.10 Safe operating area

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