

HN1C03F

For Muting And Switching Applications

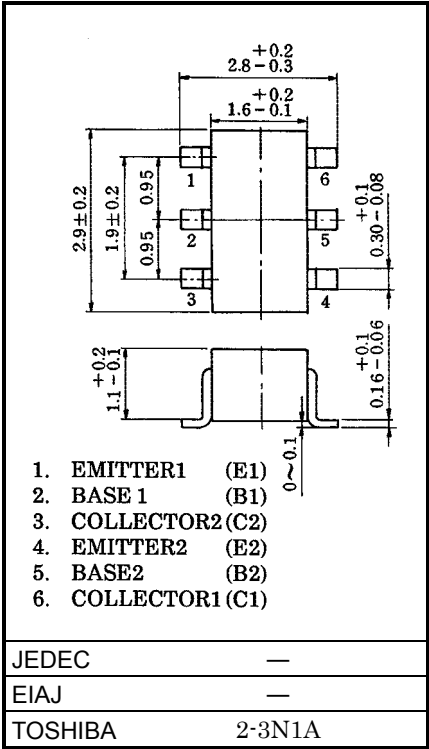
- Including two devices in SM6 (Super mini type with 6 leads)
- High emitter-base voltage: $V_{EBO} = 25V$ (min)
- High reverse h_{FE} : reverse $h_{FE} = 150$ (typ.)($V_{CE} = -2V$, $I_C = -4mA$)
- Low on resistance: $R_{ON} = 1\Omega$ (typ.)($I_B = 5mA$)

Maximum Ratings (Ta = 25°C) (Q1, Q2 Common)

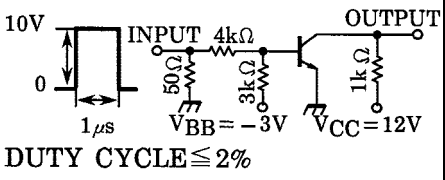
Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	25	V
Collector current	I_C	300	mA
Base current	I_B	60	mA
Collector power dissipation	P_C^*	300	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55~150	°C

* Total rating

Unit in mm

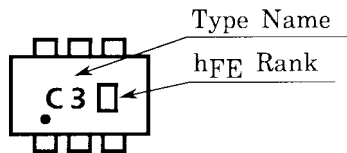


Electrical Characteristics (Ta = 25°C) (Q1,Q2 Common)

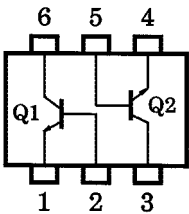
Characteristic		Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		ICBO	—	V _{CB} = 50V, I _E = 0	—	—	0.1	μA
Emitter cut-off current		IEBO	—	V _{EB} = 25V, I _C = 0	—	—	0.1	μA
DC current gain		h _{FE} (Note)	—	V _{CE} = 2V, I _C = 4mA	200	—	1200	
Collector-emitter saturation voltage		V _{CE} (sat)	—	I _C = 30mA, I _B = 3mA	—	0.042	0.1	V
Base-emitter voltage		V _{BE}	—	V _{CE} = 2V, I _C = 4mA	—	0.61	—	V
Transition frequency		f _T	—	V _{CE} = 6V, I _C = 4mA	—	30	—	MHz
Collector output capacitance		C _{ob}	—	V _{CB} = 10V, I _E = 0, f = 1MHz	—	4.8	7	pF
Switching time	Turn-on time	—	—	 DUTY CYCLE ≤ 2%	—	160	—	ns
	Storage Time	—	—		—	500	—	
	Fall time	—	—		—	130	—	

Note: h_{FE} Classification
A: 200~700, B: 350~1200

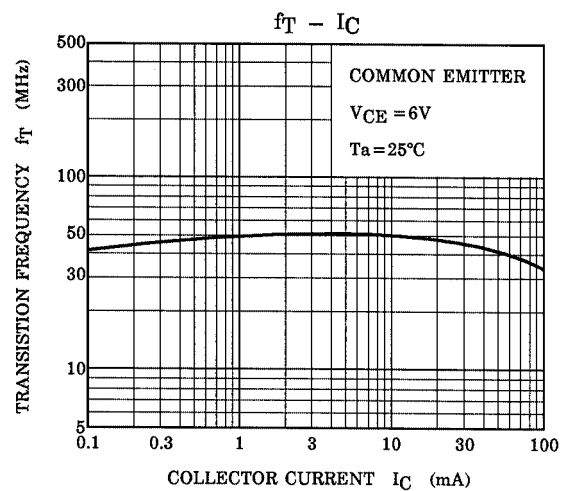
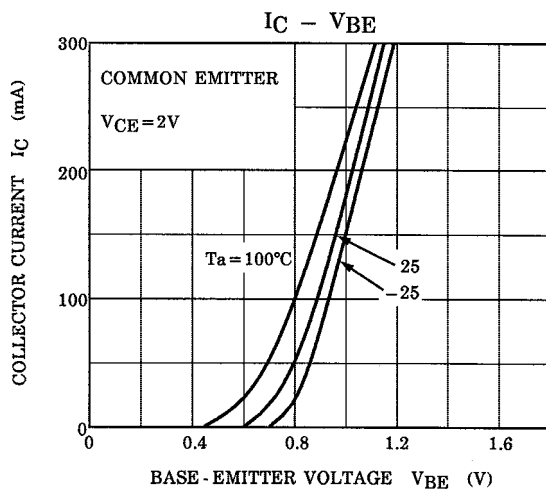
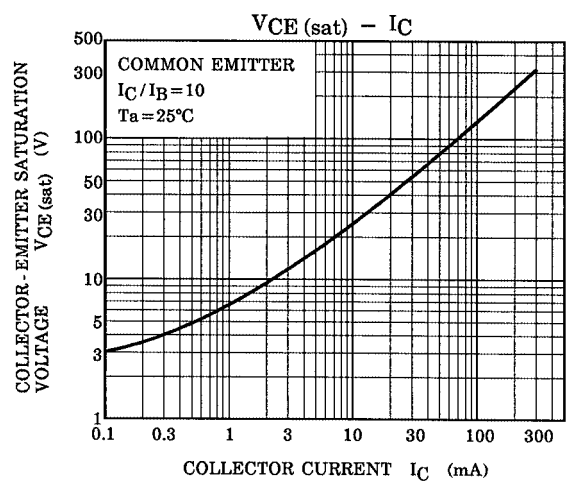
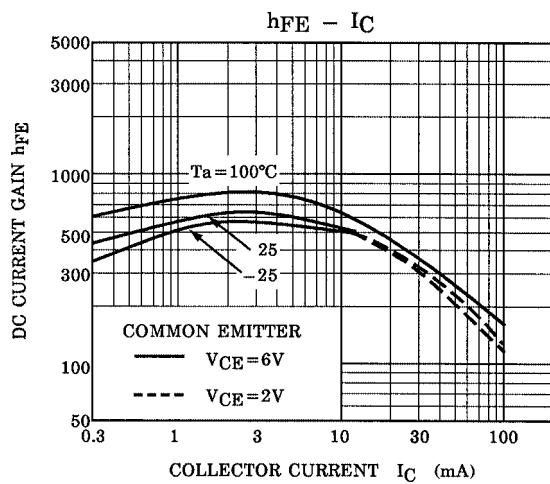
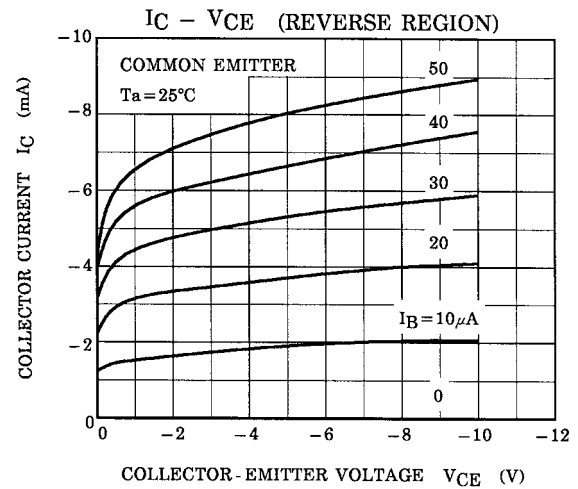
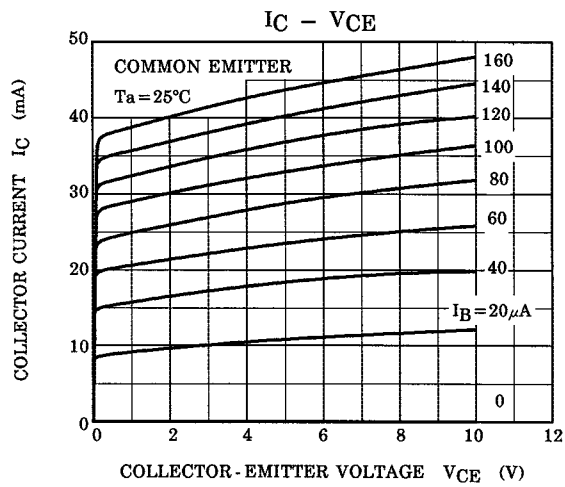
Marking



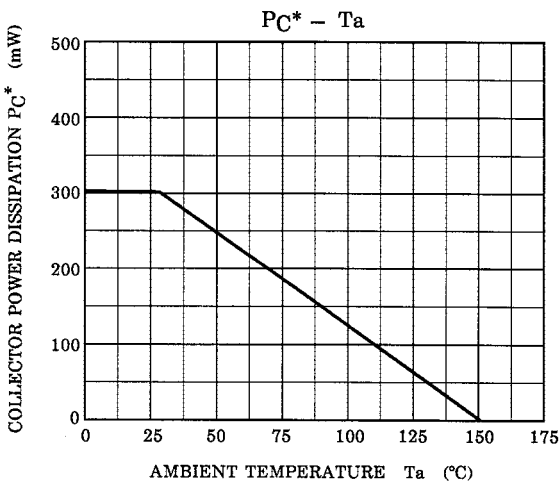
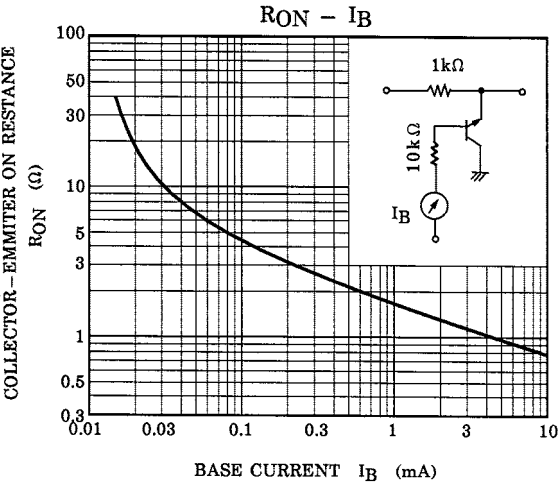
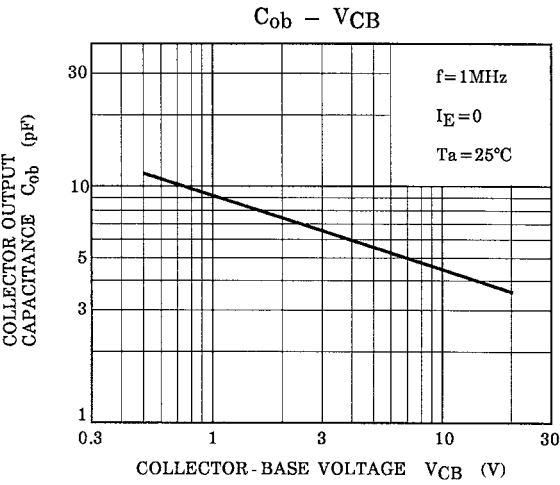
Equivalent Circuit (Top View)



(Q1,Q2 Common)



(Q1,Q2 Common)



*: Total Rating

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