DMC96403

Silicon NPN epitaxial planar type

For digital circuits
DMC56403 in SSMini6 type package

■ Features

- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Basic Part Number

Double DRC2144E (Individual)

■ Packaging

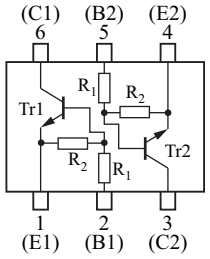
Embossed type (Thermo-compression sealing): 8000 pcs / reel (standard)

■ Package

- Code
  SSMini6-F3-B
- Pin Name
  1: Emitter (Tr1) 4: Emitter (Tr2)
  2: Base (Tr1) 5: Base (Tr2)
  3: Collector (Tr2) 6: Collector (Tr1)

■ Marking Symbol: H1

■ Internal Connection



Resistance value			
	R_1	47	kΩ
	R_2	47	

■ Absolute Maximum Ratings $T_a = 25°C$

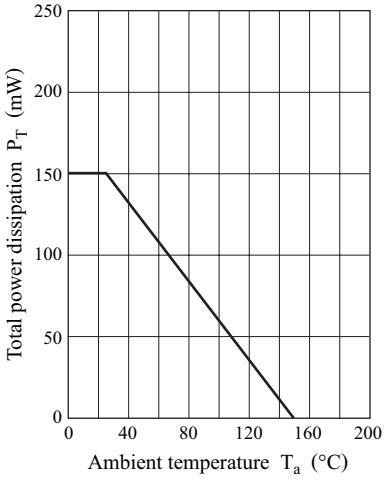
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	50	V
Collector-emitter voltage (Base open)	V_{CEO}	50	V
Collector current	I_C	100	mA
Total power dissipation	P_T	125	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

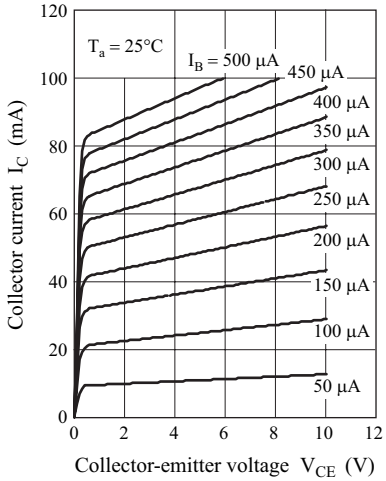
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	I_C = 10 µA, I_E = 0	50			V
Collector-emitter voltage (Base open)	V_{CEO}	I_C = 2 mA, I_B = 0	50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	V_{CB} = 50 V, I_E = 0			0.1	µA
Collector-emitter cutoff current (Base open)	I_{CEO}	V_{CE} = 50 V, I_B = 0			0.5	µA
Emitter-base cutoff current (Collector open)	I_{EBO}	V_{EB} = 6 V, I_C = 0			0.1	mA
Forward current transfer ratio	h_{FE}	V_{CE} = 10 V, I_C = 5 mA	80			—
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 10 mA, I_B = 0.5 mA			0.25	V
Input voltage (ON)	$V_{I(on)}$	V_{CE} = 0.2 V, I_C = 5 mA	3.6			V
Input voltage (OFF)	$V_{I(off)}$	V_{CE} = 5 V, I_C = 100 µA			0.8	V
Input resistance	R_1		–30%	47	+30%	kΩ
Resistance ratio	R_1 / R_2		0.8	1.0	1.2	—

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

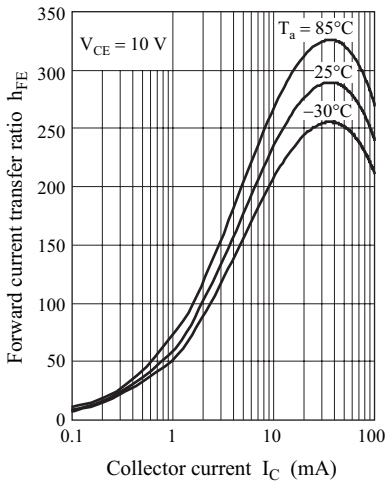
P_T — T_a



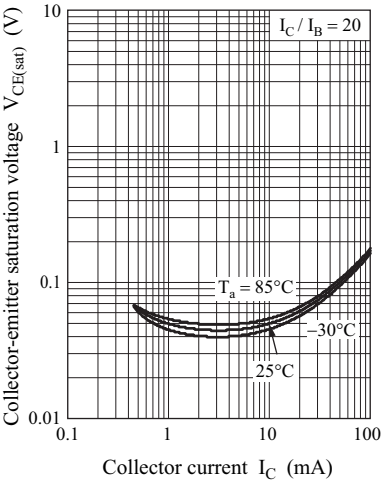
I_C — V_{CE}



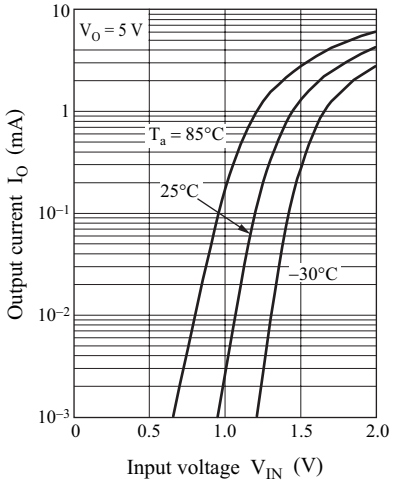
h_{FE} — I_C



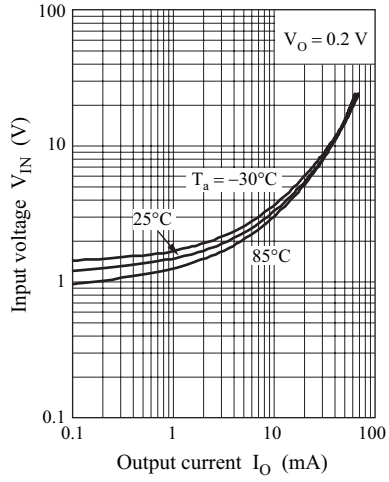
$V_{CE(sat)}$ — I_C



I_O — V_{IN}

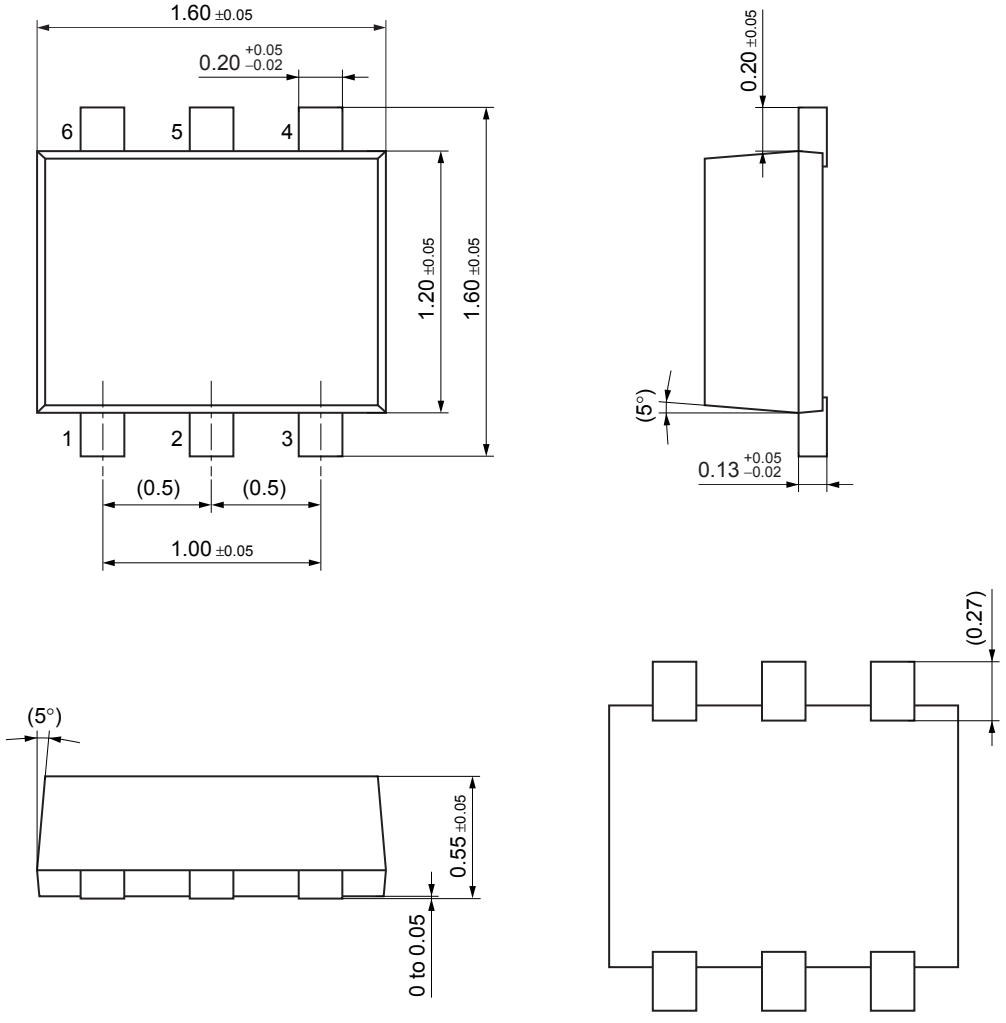


V_{IN} — I_O



SSMini6-F3-B

Unit: mm



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