DMC56106

Silicon NPN epitaxial planar type

For digital circuits
DMC26106 in SMini5 type package

■ Features

- ullet High forward current transfer ratio h_{FE} with excellent linearity
- Low collector-emitter saturation voltage V_{CE(sat)}
- Halogen-free / RoHS compliant
 (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: L5

■ Basic Part Number

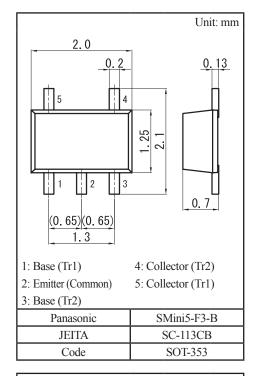
Dual DRC2143T (Common emitter)

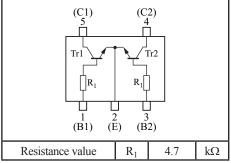
Packaging

DMC561060R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

\blacksquare Absolute Maximum Ratings $T_a = 25 ^{\circ} C$

	Parameter	Symbol	Rating	Unit
Tr1 Tr2	Collector-base voltage (Emitter open)	V _{CBO}	50	V
	Collector-emitter voltage (Base open)	V _{CEO}	50	V
	Collector current	I_{C}	100	mA
Overall	Total power dissipation	P_{T}	150	mW
	Junction temperature	T _j	150	°C
	Operating ambient temperature	T _{opr}	-40 to +85	°C
	Storage temperature	T _{stg}	-55 to +150	°C



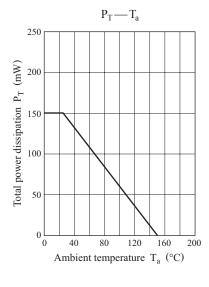


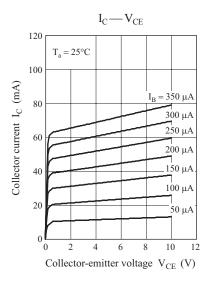
■ Electrical Characteristics $T_a = 25$ °C±3°C

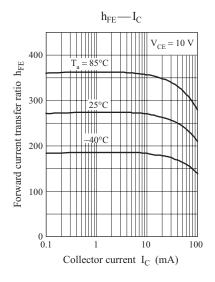
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_C = 10 \mu A, I_E = 0$	50			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = 2 \text{ mA}, I_B = 0$	50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 50 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 50 \text{ V}, I_{B} = 0$			0.5	μΑ
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 6 \text{ V}, I_{C} = 0$			0.01	mA
Forward current transfer ratio	h_{FE}	$V_{CE} = 10 \text{ V}, I_{C} = 5 \text{ mA}$	160		460	_
h _{FE} ratio *1	h _{FE} (Small/Large)	$V_{CE} = 10 \text{ V}, I_{C} = 5 \text{ mA}$	0.50	0.99		_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = 10 \text{ mA}, I_B = 0.5 \text{ mA}$			0.25	V
Input voltage (ON)	V _{I(on)}	$V_{CE} = 0.2 \text{ V}, I_{C} = 5 \text{ mA}$	1.0			V
Input voltage (OFF)	V _{I(off)}	$V_{CE} = 5 \text{ V}, I_{C} = 100 \mu\text{A}$			0.4	V
Input resistance	R_1		-30%	4.7	+30%	kΩ

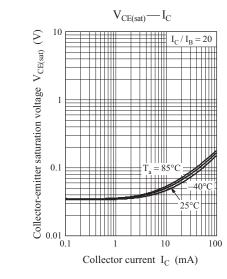
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

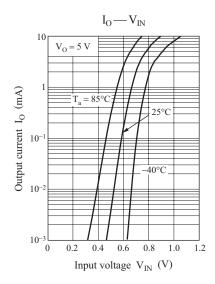
2. *1: Ratio between 2 elements

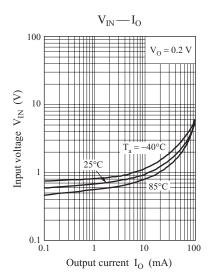






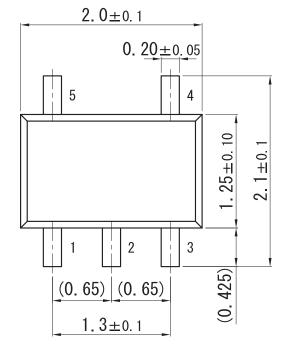


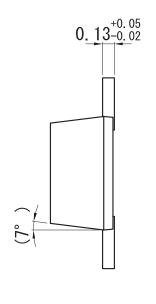


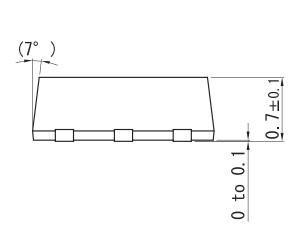


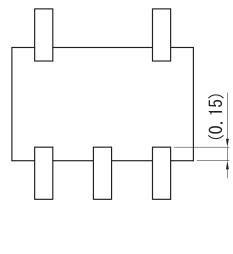
SMini5-F3-B

Unit: mm

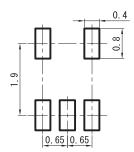








■ Land Pattern (Reference) (Unit: mm)



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