DMA56105

Silicon PNP epitaxial planar type

For digital circuits
DMA26105 in SMini5 type package

■ Features

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

■ Marking Symbol: K1

■ Basic Part Number

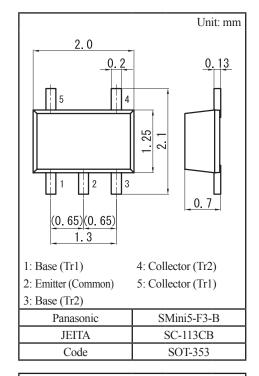
Dual DRA2114T (Common emitter)

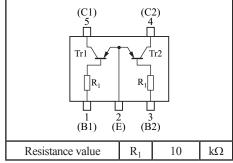
■ Packaging

DMA561050R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25$ °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}	opr —40 to +85	
	Storage temperature	T_{stg} $-55 \text{ to } +150$		°C



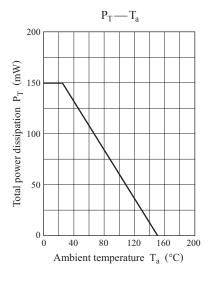


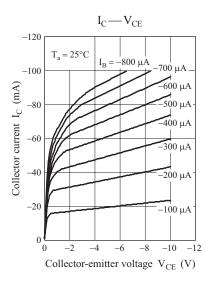
■ Electrical Characteristics $T_a = 25$ °C±3°C

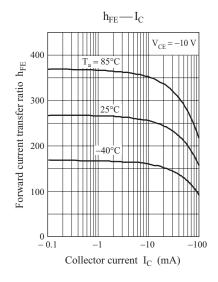
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -10 \mu \text{A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{\rm CB} = -50 \text{ V}, I_{\rm E} = 0$			-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)}	$V_{CE} = -0.2 \text{ V}, I_{C} = -5 \text{ mA}$	-1.2			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%	10	+30%	kΩ

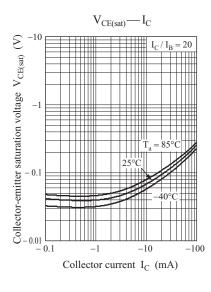
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

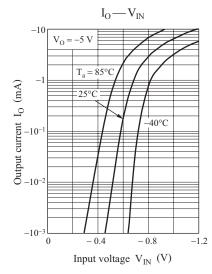
^{2. *1:} Ratio between 2 elements

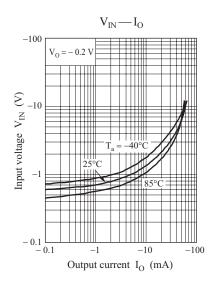






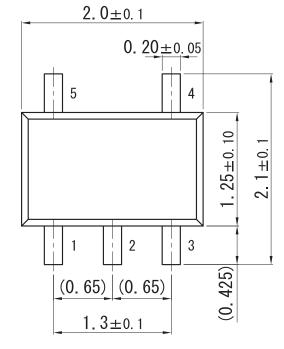


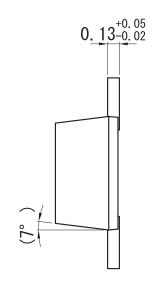


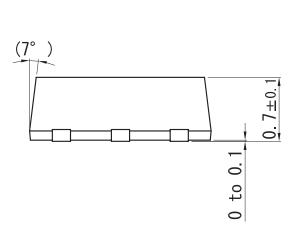


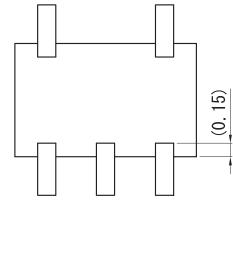
SMini5-F3-B

Unit: mm

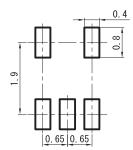








■ Land Pattern (Reference) (Unit: mm)



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