DMA56109

Silicon PNP epitaxial planar type

For digital circuits

DMA26109 in SMini5 type package

Features

- \bullet Low collector-emitter saturation voltage $V_{CE(sat)}$
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)
- Marking Symbol: P1

Basic Part Number

Dual DRA2113Z (Common emitter)

Packaging

DMA561090R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

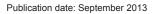
Absolute Maximum Ratings $T_a = 25^{\circ}C$

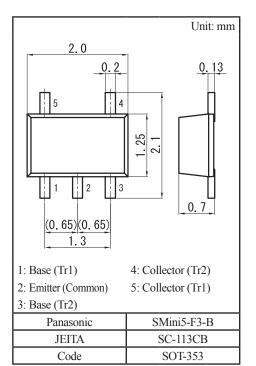
	Parameter	Symbol Rating		Unit	
Tr1 Tr2	Collector-base voltage (Emitter open)	V _{CBO}	-50	V	
	Collector-emitter voltage (Base open)	V _{CEO}	-50	V	
	Collector current	I _C	-100	mA	
Overall	Total power dissipation	P _T	150	mW	
	Junction temperature	Tj	150	°C	
	Operating ambient temperature	T _{opr}	-40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

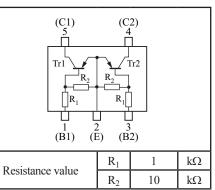
				1	$k_2 = 10$	
Electrical Characteristics $T_a = 25^{\circ}C$	±3°C					
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -10 \ \mu {\rm A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 {\rm mA}, I_{\rm B} = 0$	-50			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{\rm CB} = -50$ V, $I_{\rm E} = 0$			-0.1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{\rm CE} = -50$ V, $I_{\rm B} = 0$			-0.5	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{\rm EB} = -6 \text{V}, \text{I}_{\rm C} = 0$			-1.5	mA
Forward current transfer ratio	h _{FE}	$V_{\rm CE} = -10$ V, $I_{\rm C} = -5$ mA	30			
h _{FE} ratio *1	h _{FE} (Small/Large)	$V_{\rm CE} = -10$ V, $I_{\rm C} = -5$ mA	0.50	0.99		
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -10 \text{ mA}, I_{\rm B} = -0.5 \text{ mA}$			-0.25	V
Input voltage (ON)	V _{I(on)}	$V_{\rm CE} = -0.2$ V, $I_{\rm C} = -5$ mA	-1.0			V
Input voltage (OFF)	V _{I(off)}	$V_{\rm CE} = -5 \text{ V}, I_{\rm C} = -100 \mu\text{A}$			-0.4	V
Input resistance	R ₁		-30%	1	+30%	kΩ
Resistance ratio	R ₁ / R ₂		0.08	0.10	0.12	

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

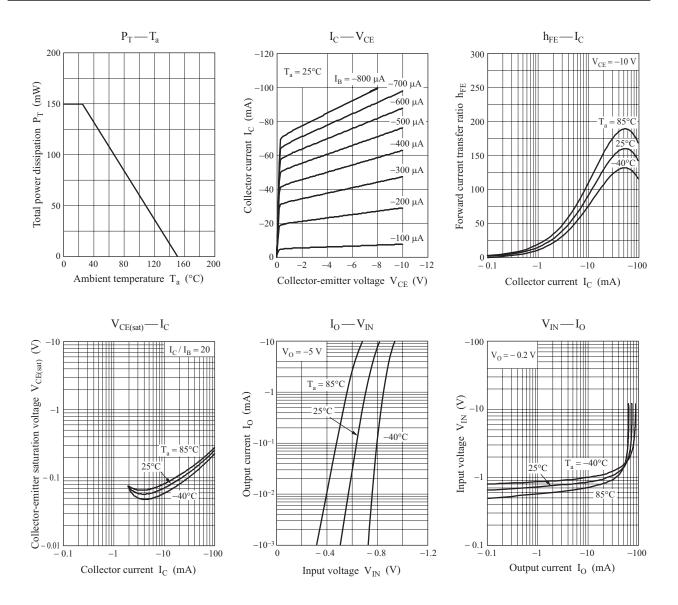
2. *1: Ratio between 2 elements





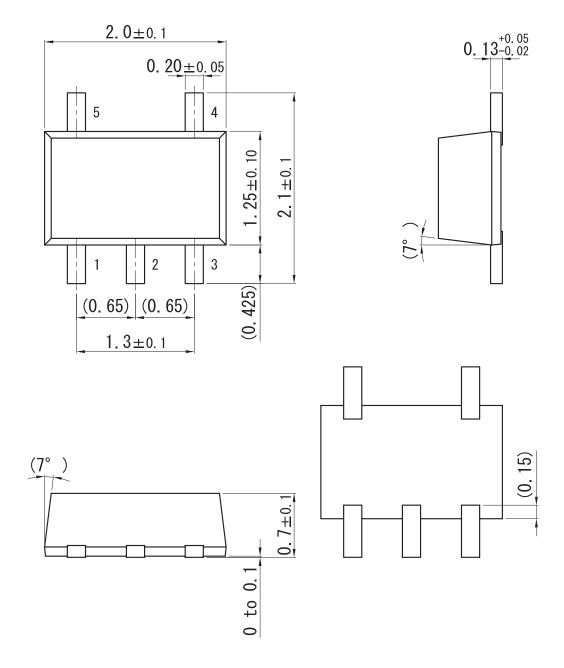


Panasonic

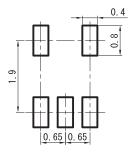


SMini5-F3-B

Unit: mm



Land Pattern (Reference) (Unit: mm)



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