# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## DMC56406

#### Silicon NPN epitaxial planar type

#### For digital circuits

DMC26406 in SMini6 type package

#### Features

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

Marking Symbol: L8

#### Basic Part Number

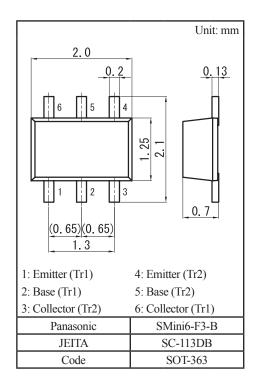
Dual DRC2143T (Individual)

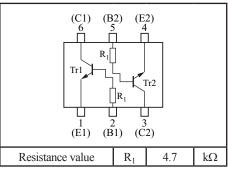
#### Packaging

DMC564060R 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 <sub>CBO</sub>	50	V	
	Collector-emitter voltage (Base open)	V <sub>CEO</sub>	50	V	
	Collector current	I <sub>C</sub>	100	mA	
Overall	Total power dissipation	P <sub>T</sub>	150	mW	
	Junction temperature	Tj	150	°C	
	Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C	
	Storage temperature	T <sub>stg</sub>	-55 to +150	°C	



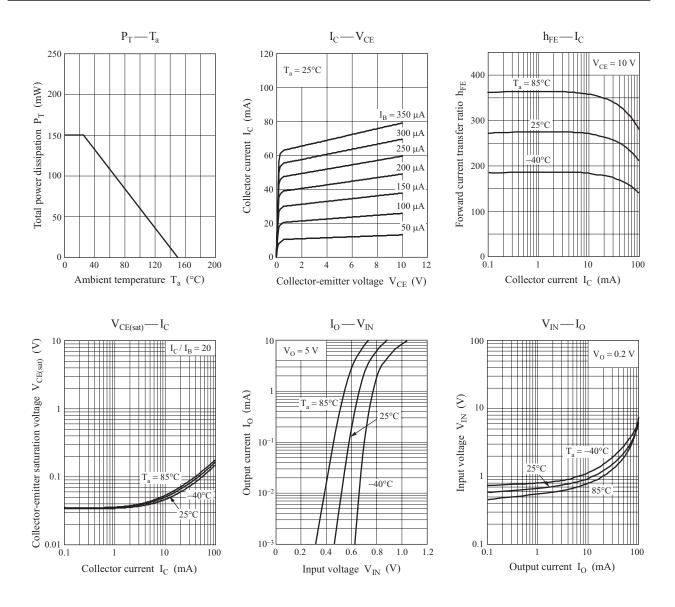


#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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

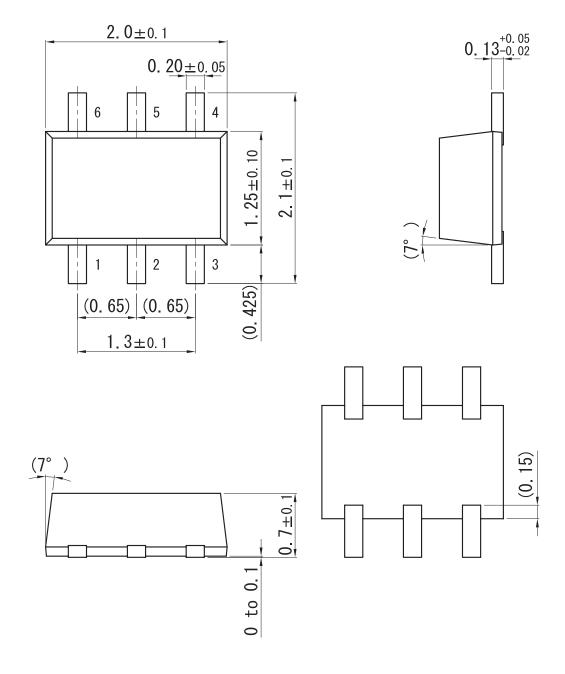
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

### **Panasonic**

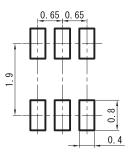


### SMini6-F3-B

Unit: mm



Land Pattern (Reference) (Unit: mm)



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