DSC7Q01

Silicon NPN epitaxial planar type darlington

For low frequency output amplification DSC8Q01 in MiniP3 type package

■ Features

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

■ Packaging

Embossed type (Thermo-compression sealing): 1000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	100	V
Collector-emitter voltage (Base open)	V _{CEO}	80	V
Emitter-base voltage (Collector open)	V _{EBO}	5	V
Collector current	$I_{\rm C}$	1	A
Peak collector current	I_{CP}	1.5	A
Collector power dissipation	P _C	1	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

Note) Printed circuit board: Copper foil area of 1 cm² or more, and the board thickness of 1.7 mm for the collector portion

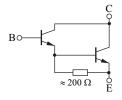
Absolute maximum rating without heat sink for P_C is 0.5 W

■ Package Code

MiniP3-F2-B

- Pin Name
 - 1. Base
 - 2. Collector
 - 3. Emitter

■ Marking Symbol: 5K



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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 100 \mu\text{A}, I_E = 0$	100			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	80			V
Emitter-base voltage (Collector open)	$V_{\rm EBO}$	$I_E = 100 \mu A, I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 25 \text{ V}, I_{E} = 0$			0.1	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = 4 \text{ V}, I_{C} = 0$			0.1	μΑ
Forward current transfer ratio *1,2	h _{FE}	$V_{CE} = 10 \text{ V}, I_{C} = 1 \text{ A}$	4000		40 000	_
Collector-emitter saturation voltage *1	V _{CE(sat)}	$I_{\rm C} = 1 \text{ A}, I_{\rm B} = 1 \text{ mA}$			1.8	V
Base-emitter saturation voltage *1	V _{BE(sat)}	$I_C = 1 \text{ A}, I_B = 1 \text{ mA}$			2.2	V

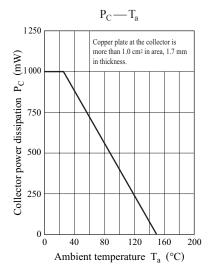
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

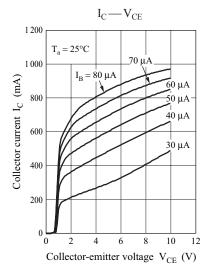
- 2. *1: Pulse measurement
 - *2: Rank classification

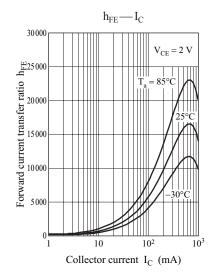
Code	Q	R	S	0
Rank	Q	R	S	No-rank
h_{FE}	4000 to 10000	8000 to 20000	16000 to 40000	4000 to 40000
Marking Symbol	5KQ	5KR	5KS	5K

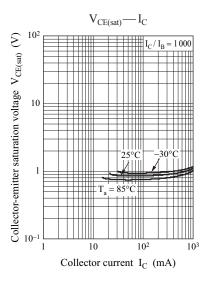
Product of no-rank is not classified and have no marking symbol for rank.

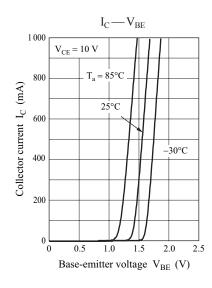
DSC7Q01 Panasonic

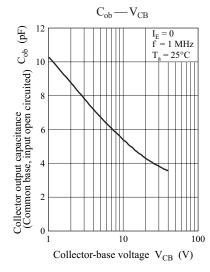


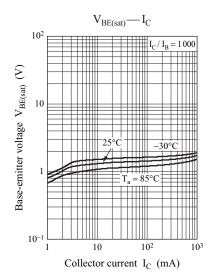








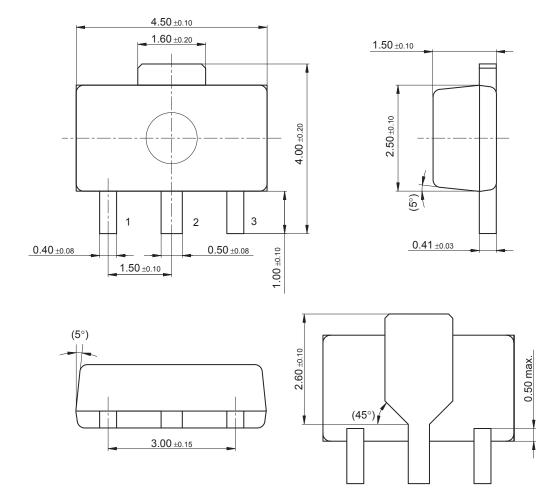




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MiniP3-F2-B

Unit: mm



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