

2SD250400A Datasheet



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DiGi Electronics Part Number 2SD250400A-DG

Manufacturer Panasonic Electronic Components

Manufacturer Product Number 2SD250400A

Description TRANS NPN 10V 5A T092-B1

Detailed Description Bipolar (BJT) Transistor NPN 10 V 5 A 170MHz 750 m

W Through Hole TO-92-B1



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.



Purchase and inquiry

Manufacturer Product Number:	Manufacturer:			
2SD250400A	Panasonic Electronic Components			
Series:	Product Status:			
	Obsolete			
Transistor Type:	Current - Collector (Ic) (Max):			
NPN	5 A			
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ lb, lc:			
10 V	500mV @ 100mA, 3A			
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:			
1µА	300 @ 500mA, 2V			
Power - Max:	Frequency - Transition:			
750 mW	170MHz			
Operating Temperature:	Mounting Type:			
150°C (TJ)	Through Hole			
Package / Case:	Supplier Device Package:			
TO-226-3, TO-92-3 (TO-226AA) Formed Leads	TO-92-B1			
Base Product Number:				
2SD2504				

Environmental & Export classification

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0075	

2SD2504

Silicon NPN epitaxial planar type

For low-frequency power amplification

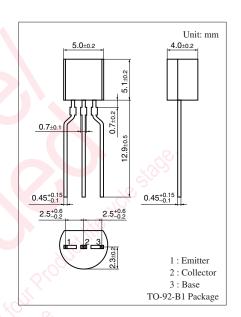
■ Features

- Low collector-emitter saturation voltage V_{CE(sat)}
- Large collector current I_C

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	15	V	
Collector-emitter voltage (Base open)	V_{CEO}	10	V	
Emitter-base voltage (Collector open)	V_{EBO}	10	V	
Collector current	I_{C}	5	A	
Peak collector current *	I_{CP}	9	A	
Collector power dissipation	P_{C}	750	mW	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	



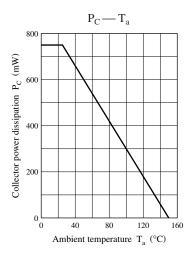


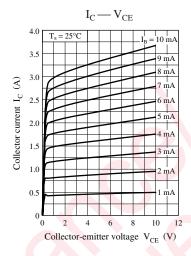
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

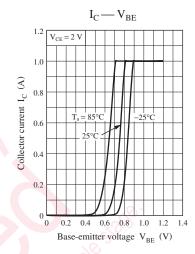
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 1 \text{ mA}, I_E = 0$	10	<u>J</u>		V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 10 \mu\text{A}, I_B = 0$	10			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 10 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 5 \text{ V}, I_{B} = 0$			1.0	μΑ
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 5 \text{ V}, I_{E} = 0$			0.1	μΑ
Forward current transfer ratio *	h _{FE1}	$V_{CE} = 2 \text{ V}, I_{C} = 0.5 \text{ A}$	300		800	_
	h _{FE2}	$V_{CE} = 2 \text{ V}, I_{C} = 2 \text{ A}$	195			
Collector-emitter saturation voltage *	V _{CE(sat)}	$I_C = 3 A, I_B = 0.1 A$		0.28	0.50	V
Transition frequency	f_T	$V_{CB} = 6 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$		170		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 20 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		45	65	pF
(Common base, input open circuited)						

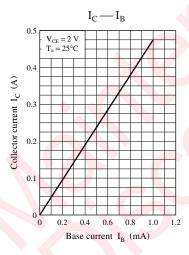
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

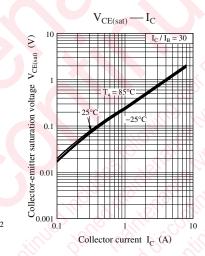
2. *: Pulse measurement

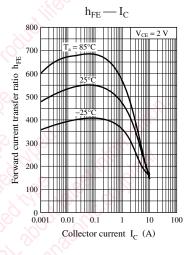


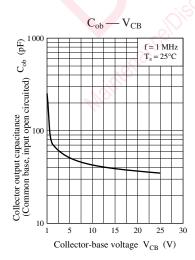












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