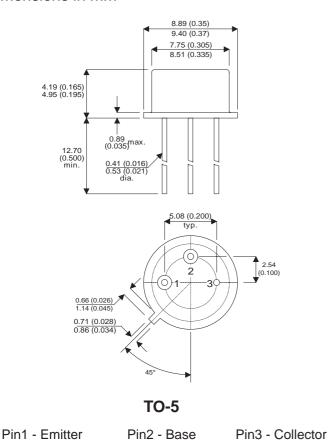


2N5404 2N5405 2N5406 2N5407

MECHANICAL DATA

Dimensions in mm



SMALL SIGNAL PNP TRANSISTORS IN TO-5

APPLICATIONS

Small signal PNP transistors for relay switching resistor logic circuits and general purpose applications.

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

		2N5404	2N5405	2N5406	2N5407	
BV _{CBO}	Collector – Base Breakdown Voltage	- 80V	- 100V	- 80V	- 100V	
BV_CEO	Collector – Emitter Breakdown Voltage	- 80V	- 100V	- 80V	- 100V	
BV_EBO	Emitter – Base Breakdown Voltage	- 6V	-6V	- 6V	-6V	
I _{C(Max)}	Collector Current	– 5A	-5A	– 5A	-5A	
I _{B(Max)}	Base Current	- 2A	- 2A	- 2A	– 2A	
P _{TOT}	Total Power Dissipation (100°C Case)	5W	5W	5W	5W	
T_{STG} , T_{J}	Operating and Storage Temperature	− 65°C to +200°C				
	Range					

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

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2N5404 2N5405 2N5406 2N5407

ELECTRICAL CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

Parameter Test Conditions		Min.	Тур.	Max.	Unit			
	Collector Cut-Off Current	V _{CE} =BV _{CEO}	$V_{BE} = 1.5V$				– 10	
I _{CEX}		V _{CE} =BV _{CEO}	$V_{CE} = BV_{CEO}$ $V_{BE} = 1.5V$				- 500	μА
		T _C = 150°C						
V _{CEO} (SUS)	Collector-Emitter Sustaining Voltage With Base Open	I _C = -100mA	I _B = 0	2N5404	-80			V
				2N5406	-00			
		I _C = -100mA	$I_B = 0$	2N5405	I -100		V	
				2N5407				
I _{CEO}	Collector Cut-Off Current	$V_{CE} = -50V$	I _C = 0		-100			μA
I _{EBO}		$V_{EB} = -4V$	$I_C = 0$				-1	μA
	Common Fruitter Croall Cignal Value	1 24	V _{CE} = -5V	2N5404	20		60	
		IC = -2A		2N5405	20			
h _{FE}	of the Short-Circuit Forward Current Transfer Ratio (f = 1KHz)	I _C = -2A	V _{CE} = -5V	2N5406	40		120	_
				2N5407	40			
V _{CE} (SAT)	Collector-Emitter Saturation Voltage	$I_C = -2A$	$I_{B} = -0.2A$				-0.6	V
V _{BE} (SAT)	Base-Emitter Saturation Voltage	$I_C = -2A$	$I_{B} = -0.2A$				-1.2	V
DYNAMIC CHARACTERISTICS								
C _{OBO}	Collector Base Capacitance	$V_{CB} = -10V$	$f = 1MH_Z$				150	pf
f _t	Transistion Frequency	$V_{CE} = -5V$	$I_{\rm C} = -0.2A$		40			MHz
	Rise Time	I _C = -2A				0.5	μ	
t _r		$I_{B1} = -I_{B2} = 0.2A$						
t _s	Storage time	$I_C = -2A$		2N5404		0.75		
		$I_{B1} = -I_{B2} = 0.2A$ 2N5405		2N5405			0.75	
		$I_{C} = -2A$ 2N5406				1	μ	
		$I_{B1} = -I_{B2} = 2i$	A	2N5407			'	
t _f	Fall Time	I _C = -2A		2N5404			0.2	
		$I_{B1} = -I_{B2} = 2A$ 2N540		2N5405		0.	0.2	_
		$I_{C} = -2A$ 2N5406				0.3	μ	
		$I_{B1} = -I_{B2} = 2i$	A	2N5407		0.3		

 $^{^{\}star}$ Pulse test : Pulse Width < 300 μs ,Duty Cycle < 2%

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