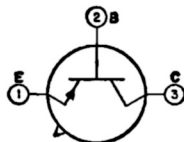


TRANSISTOR

2N404
2N404A

Germanium p-n-p types used in medium-speed switching applications in data-processing equipment. These types also have wide application in other low-level, medium-speed "on-off" control circuits.



JEDEC No. TO-5 package; outline 6, Outlines Section.

MAXIMUM RATINGS

	2N404	2N404A	
Collector-to-Base Voltage (with emitter open)	-25 max	-40 max	volts
Collector-to-Emitter Voltage (with emitter-to-base volts = -1)	-24 max	-35 max	volts
Emitter-to-Base Voltage (with collector open)	-12 max	-25 max	volts
Collector Current	-100 max	-150 max	ma
Emitter Current	100 max	150 max	ma
Transistor Dissipation:			
At ambient temperatures up to 25°C	150 max	150 max	mW
At ambient temperatures above 25°C	See curve page 80		
Ambient-Temperature Range:			
Operating	-65 to 85	-65 to 100	°C
Storage	-65 to 100	-65 to 100	°C
Lead Temperature (for 10 seconds maximum)	255 max	255 max	°C

CHARACTERISTICS

Collector-to-Emitter Saturation Voltage:			
With collector ma = -12 and base ma = -0.4	-0.15 max		volt
With collector ma = -24 and base ma = -1	-0.2 max		volt
Base-to-Emitter Saturation Voltage:			
With collector ma = -12 and base ma = -0.4	-0.35 max		volt
With collector ma = -24 and base ma = -1	-0.40 max		volt
Collector-Cutoff Current (with collector-to-base volts = -12 and emitter current = 0)			
	-5 max		μa
Stored Base Charge (with collector ma = -10 and base ma = -1)	-1400 max		pCoul

In Common-Base Circuit

Collector-to-Base Capacitance (with collector-to-base volts = -6 and collector current = 0)	20 max	pf
Forward-Current-Transfer-Ratio Cutoff Frequency (with collector-to-base volts = -6 and collector ma = -1)	4 min	Mc

In Common-Emitter Circuit

DC Forward Current-Transfer Ratio:

With collector-to-emitter volts = -0.2 and collector ma = -24	24 min
With collector-to-emitter volts = -0.15 and collector ma = -12	30 min