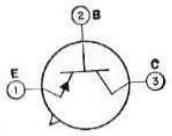
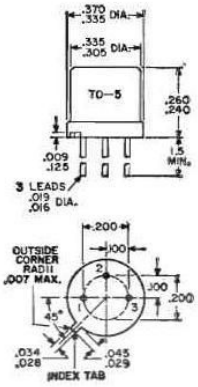
TRANSISTOR

2N414

Germanium p-n-p type used in medium-speed switching applications in data-processing equipment. JEDEC No. TO-5; outline 6, Outlines Section.





MAXIMUM RATINGS

Collector-to-Base Voltage (with emitter open)	−30 max	volts
Collector-to-Emitter Voltage:		
With base open	−15 max	volts
With base-to-emitter volts = 1	−20 max	volts
Emitter-to-Base Voltage (with collector open)	−20 max	volts
Peak Collector Current	−400 max	ma
DC Collector Current	−200 max	ma
Transistor Dissipation:		
At ambient temperatures up to 25°C	150 max	mw
At ambient temperatures above 25°C	See curve page 80	
Ambient-Temperature Range:		
Operating and storage	−65 to 85	°C
Lead Temperature (for 10 seconds maximum)	240 max	°C

CHARACTERISTICS

Collector-Cutoff Current (with collector-to-base volts = −12 and emitter current = 0)	−5 max	μa
In Common-Base Circuit		
Collector-to-Base Capacitance (with collector-to-base volts = −6 and emitter ma = 1)	11	pf
Forward-Current-Transfer-Ratio Cutoff Frequency (with collector-to-base volts = −6 and emitter ma = 1)	8	Mc
Small-Signal Open-Circuit Reverse Voltage-Transfer Ratio (with collector-base volts = −6, emitter ma = 1, and frequency = 1 kilocycle)	0.0005	
In Common-Emitter Circuit		
Small-Signal Forward Current-Transfer Ratio (with collector-to-emitter volts = −6, emitter ma = 1, and frequency = 1 kilocycle)	80	