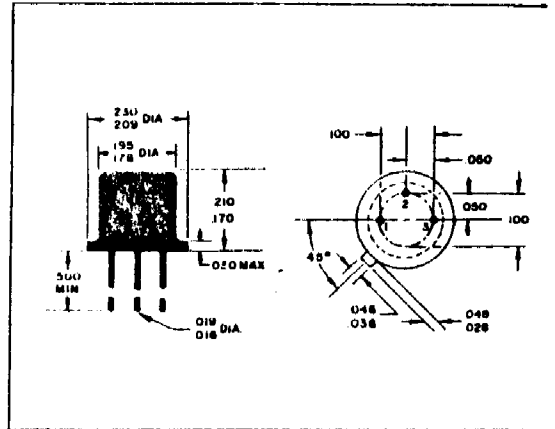


# 2N718

## NPN TRANSISTOR SILICON

### MECHANICAL DATA

CASE: JEDEC TO-18  
TERMINAL CONNECTIONS:  
Lead 1 Emitter      Lead 2 Base  
Lead 3 Collector (Electrically connected to case)



### ELECTRICAL DATA

#### ABSOLUTE MAXIMUM RATINGS:

Collector to Base Voltage $V_{CBO}$	60 volts
Collector to Emitter Voltage ( $R_{BE} \leq 10\Omega$ ) $V_{CER}$	40 volts
Emitter to Base Voltage $V_{EBO}$	5 volts
Total Device Dissipation	
@ Case Temperature 25° C	1.5 watts
@ Case Temperature 100° C	0.75 watts
@ Free Air Temperature 25° C	0.4 watts
Junction Temperature (Operating)	-65° C to +200° C
Storage Temperature	-65° C to +300° C

#### ELECTRICAL CHARACTERISTICS: @25° C (unless otherwise noted)

PARAMETER	SYM.	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Collector to Base Breakdown Voltage	$BV_{CBO}$	$I_C = -100 \mu A$	60			volts
Collector to Emitter Breakdown Voltage	$BV_{CER}$	$R_{BE} \leq 10\Omega, I_C = -100 mA$	40			volts
Emitter to Base Breakdown Voltage	$BV_{EBO}$	$I_E = 1 mA$	5			volts
Collector Cutoff Current	$I_{CBO1}$	$V_{CB} = 30 V$			1.0	$\mu A$
Collector Cutoff Current	$I_{CBO2}$	$V_{CB} = 30 V, T_A = +150^\circ C$			100	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = 10 V, I_C = 150 mA$				
		2N717	20		60	
		2N718	40		120	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 150 mA, I_B = 15 mA$			1.5	volts
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 150 mA, I_B = 15 mA$			1.3	volts
High Frequency Small Signal Current Gain	$h_{fe}$	$V_{CE} = 10 V, I_C = 50 mA,$ $f = 20 mc$				
		2N717	2.0			
		2N718	2.5			
Collector Capacitance	$C_{ob}$	$V_{CB} = 10 V, I_C = 0 mA$			35	pf
Input Capacitance	$C_{ib}$	$V_{EB} = 0.5 V, I_C = 0 mA$			80	pf

▲ Measured with 300  $\mu$ Sec, 2% duty cycle pulse



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