



ShenzhenTaimaoTechnology Co.,Ltd.

TO-92 Plastic-Encapsulate Transistors

2N6718 TRANSISTOR (NPN)

FEATURES

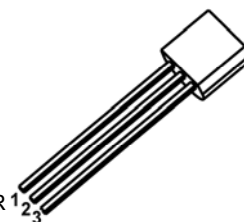
- General Purpose Switching Application

TO - 92

1. EMITTER

2. BASE

3. COLLECTOR



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1\text{mA}, I_E=0$	100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=100\text{V}, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1\text{V}, I_C=50\text{mA}$	80			
	$h_{FE(2)}$	$V_{CE}=1\text{V}, I_C=250\text{mA}$	50		250	
	$h_{FE(3)}$	$V_{CE}=1\text{V}, I_C=500\text{mA}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	$I_C=250\text{mA}, I_B=10\text{mA}$			0.5	V
	$V_{CE(sat)(2)}$	$I_C=250\text{mA}, I_B=25\text{mA}$			0.35	V
Base-emitter voltage	V_{BE}	$V_{CE}=1\text{V}, I_C=250\text{mA}$			1.2	V
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, f=1\text{MHz}$			30	pF
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}$	50			MHz

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycles $\leq 2.0\%$.