



TO-92 Plastic-Encapsulate Transistors

KTC3198 TRANSISTOR (NPN)

FEATURE

Power dissipation

P_{CM} : 0.625 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.15 A

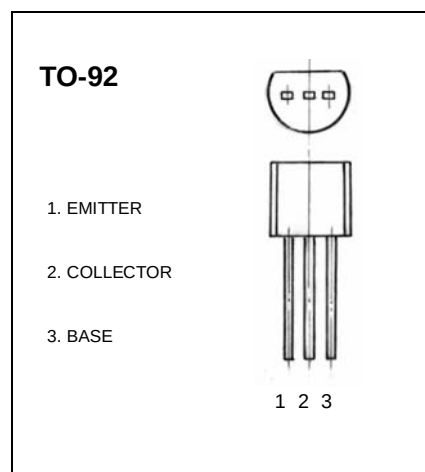
Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

T_J : $150^{\circ}C$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A$, $I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=5\text{ mA}$, $I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A$, $I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V$, $I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V$, $I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=6V$, $I_C=2\text{ mA}$	70		700	
	$h_{FE(2)}$	$V_{CE}=6V$, $I_C=150\text{ mA}$	25	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{ mA}$, $I_B=10\text{ mA}$		0.1	0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{ mA}$, $I_B=10\text{ mA}$			1	V
Transition frequency	f_T	$V_{CE}=10\text{ V}$, $I_C=1\text{ mA}$ $f=30\text{ MHz}$	80			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700