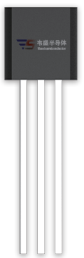
KTC3192 TRANSISTOR(NPN)



1.EMITTER
2.COLLECTOR
3.BASE

TO-92

FEATURE

- High Power Gain: Gpe=29dB(Typ)(f=10.7MH$_Z$)

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KTC3192	TO-92	Bulk	1000pcs/Bag
KTC3192-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25 ℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	50	mA
P_C	Collector Power Dissipation	625	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100μA, I_E=0	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 1mA , I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA, I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}= 35V , I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 4V , I_C=0			1.0	μA
DC current gain	h_{FE}	V_{CE}=12 V, I_C= 2mA	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 10mA, I_B= 1mA			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 10mA, I_B= 1mA			1.0	V
Transition frequency	f_T	V_{CE}= 10 V, I_C= 1mA	100		400	MHz
Collector output capacitance	C_{ob}	V_{CB}=10 V,I_E=0,f=1MH$_Z$	1.4		3.2	pF
Collector-base time constant	$C_{c.rbb'}$	V_{CE}=10V,I_C=1mA, f=30MH$_Z$	10		50	pS
Power gain	Gpe	V_{CC}=6V,I_C=1mA, f=10.7MH$_Z$	27		33	dB

CLASSIFICATION OF h_{FE}

Rank	R	O	Y
Range	40-80	70-140	120-240