

SEMICONDUCTOR TECHNICAL DATA

KTC3198 EPITAXIAL PLANAR NPN TRANSISTOR

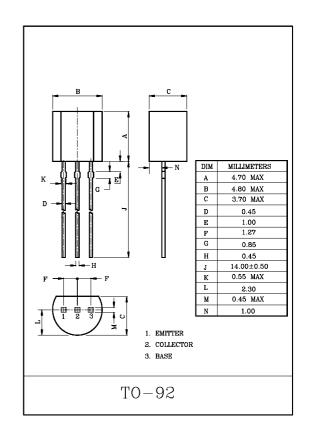
GENERAL PURPOSE APPLICATION. SWITCHING APPLICATION.

FEATURES

- · Excellent hFE Linearity
 - : $h_{FE}(2)=100(Typ.)$ at $V_{CE}=6V$, $I_{C}=150mA$. : $h_{FE}(I_{C}=0.1mA)/h_{FE}(I_{C}=2mA)=0.95(Typ.)$
- Low Noise: NF=1dB(Typ.) at f=1kHz.
- · Complementary to KTA1266 (O,Y,GR class).

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	V_{CBO}	60	V	
Collector-Emitter Voltage	V_{CEO}	50	V	
Emitter-Base Voltage	V_{EBO}	5	V	
Collector Current	$I_{\rm C}$	150	mA	
Base Current	I_{B}	50	mA	
Collector Power Dissipation	Pc	625	mW	
Junction Temperature	$T_{\rm j}$	150	${\mathbb C}$	
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}$	



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} =60V, I_{E} =0	-	-	0.1	μΑ
Emitter Cut-off Current	$I_{ m EBO}$	V_{EB} =5 V , I_{C} =0	-	-	0.1	μΑ
DC Current Gain	h _{FE} (1) (Note)	V _{CE} =6V, I _C =2mA	70	_	700	
	h _{FE} (2)	$V_{CE}=6V$, $I_{C}=150mA$	25	100	-	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA	-	0.1	0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_{C}=100mA$, $I_{B}=10mA$	_	_	1.0	V
Transition Frequency	f_{T}	V_{CE} =10V, I_{E} =-1mA	80	_	_	MHz
Collector Output Capacitance	Cob	V_{CB} =10V, I_{E} =0, f=1MHz	-	2.0	3.5	рF
Base Intrinsic Resistance	rbb'	V _{CB} =10V, I _C =-1mA, f=30MHz	-	50	-	Ω
Noise Figure	NF	V_{CE} =6V, I_{C} =0.1mA, Rg =10k Ω , f =1kHz	-	1.0	10	dB

Note : h_{FE} Classification O:70~140, Y:120~240, GR:200~400, BL:300~700

