KTC3964

EPITAXIAL PLANAR NPN TRANSISTOR

HIGH CURRENT APPLICATION.

Switching Applications

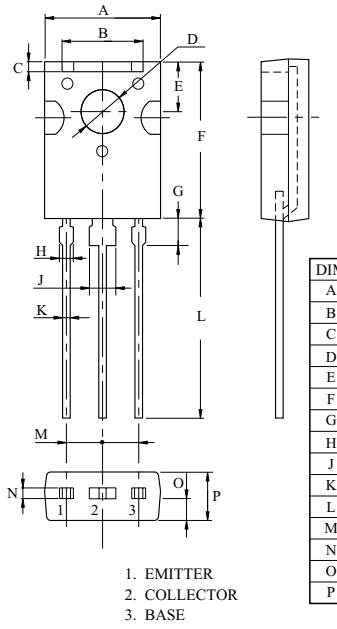
Solenoid Drive Applications

Temperature Compensated for Audio Amplifier Output Stage

FEATURES

· High DC current gain : h_{FE} = 500(min) (I_C=400mA)

· Low Collector emitter saturation voltage : V_{CE}(sat)=0.5V(max)
(I_C=300mA)



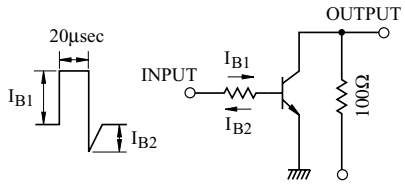
DIM	MILLIMETERS
A	8.3 MAX
B	5.8
C	0.7
D	Φ3.2±0.1
E	3.5
F	11.0±0.3
G	2.9 MAX
H	1.0 MAX
J	1.9 MAX
K	0.75±0.15
L	15.50±0.5
M	2.3±0.1
N	0.65±0.15
O	1.6
P	3.4 MAX

TO-126

MAXIMUM RATING (Ta=25℃)

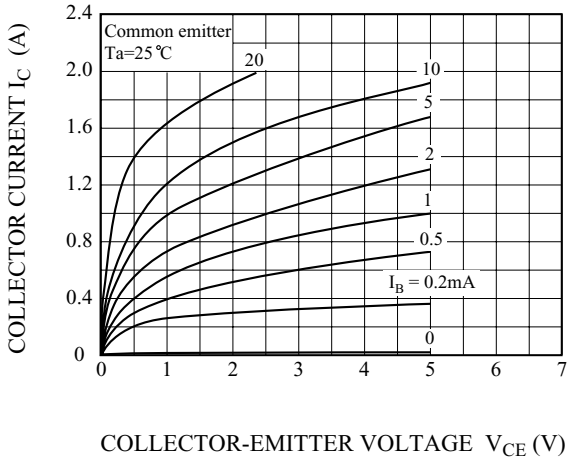
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	2	A
Collector Power Dissipation	P_C	1.5	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

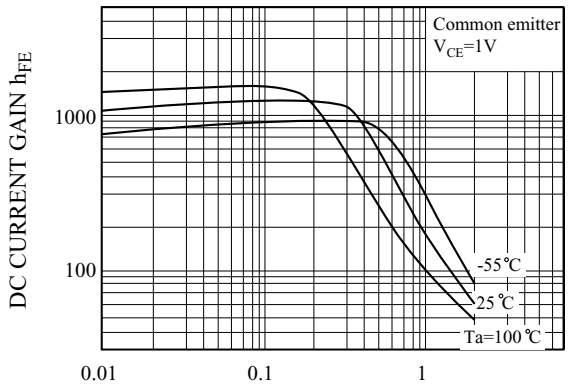
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=40V, I_E=0	-	-	10	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=7V, I_C=0	-	-	1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=10mA, I_B=0	40	-	-	V
DC Current Gain		h_{FE}	V_{CE}=1V, I_C=400mA	500	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=300mA, I_B=1mA	-	0.3	0.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	I_C=300mA, I_B=1mA	-	-	1.1	V
Transition Frequency		f_T	V_{CE}=2V, I_C=100mA	-	220	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	20	-	pF
Switching Time	Turn On Time	t_{on}		-	1.0	-	μS
	Storage Time	t_{stg}		-	3.0	-	
	Fall Time	t_f		-	1.2	-	

I_{B1}=-I_{B2}=-1mA, DUTY CYCLE≦1% V_{CC}=30V

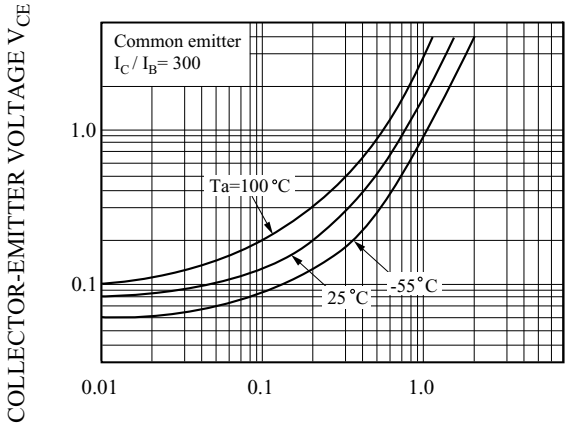
I_C - V_{CE}



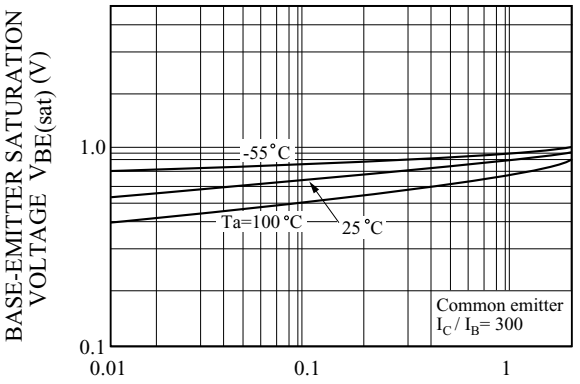
h_{FE} - I_C



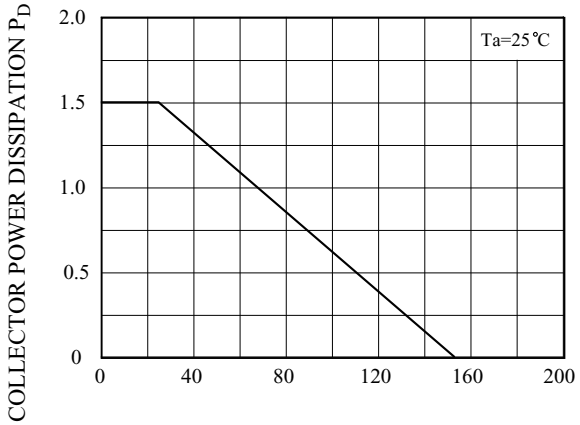
$V_{CE(sat)}$ - I_C



$V_{BE(sat)}$ - I_C



P_D - Ta



Safe Operation Area