

SEMICONDUCTOR
TECHNICAL DATA

KTC2803

EPITAXIAL PLANAR NPN TRANSISTOR

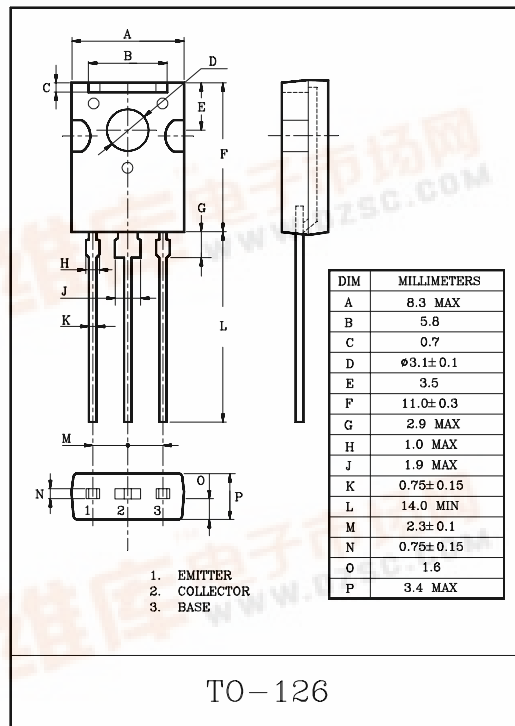
AUDIO FREQUENCY, HIGH FREQUENCY
POWER AMPLIFIER

FEATURES

- Complementary to KTA1704.

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	120	V
Collector-Emitter Voltage		V_{CEO}	120	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	1.2	A
	Pulse (Note1)		2.5	
Base Current		I_B	0.3	A
Collector Power Dissipation	Ta=25℃	P_C	1.5	W
	Tc=25℃		20	
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55~150	℃

Note 1 : Pulse Width $\leq 10\text{ms}$, Duty Cycle $\leq 50\%$ 

ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut of Current	I_{CBO}	$V_{CB}=50\text{V}$, $I_E=0$	-	-	1	μA
Emitter Cut of Current	I_{EBO}	$V_{EB}=4\text{V}$, $I_C=0$	-	-	1	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}$	120	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$	120	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}$	5	-	-	V
DC Current Gain	$h_{FE(1)\text{Note}}$	$V_{CE}=5\text{V}$, $I_C=50\text{mA}$	100	-	320	
	$h_{FE(2)}$	$V_{CE}=5\text{V}$, $I_C=500\text{mA}$	20	-	-	
Gain Bandwidth Product	f_T	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$	-	110	-	MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $f=1\text{MHz}$	-	30	-	pF
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$	-	0.15	0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$	-	0.85	1.2	V

(Note) : $h_{FE(1)}$ Classification Y:100~200 , GR:160~320

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