

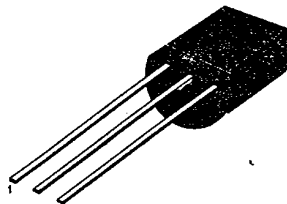
KSD227**NPN EPITAXIAL SILICON TRANSISTOR****LOW FREQUENCY POWER AMPLIFIER**

- Complement to KSA642
- Collector Dissipation $P_C=400\text{mW}$

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CE0}	25	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	300	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ\text{C}$

TO-92



1. Emitter 2. Base 3. Collector

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C=100\mu\text{A}, I_E=0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C=10\text{mA}, I_B=0$	25			V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E=-10\mu\text{A}, I_C=0$	5			V
Collector Cut-off Current	I_{C0}	$V_{CB}=25\text{V}, I_E=0$			0.1	μA
Emitter Cut-off Current	I_{E0}	$V_{EB}=3\text{V}, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=1\text{V}, I_C=50\text{mA}$	70		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=300\text{mA}, I_B=30\text{mA}$		0.14	0.4	V

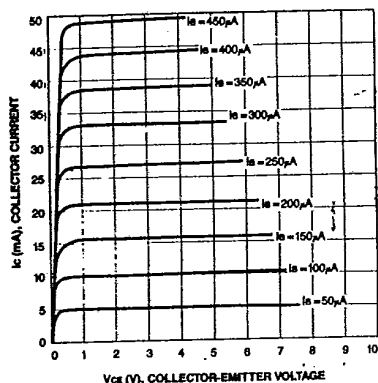
 h_{FE} CLASSIFICATION

Classification	O	Y	G
h_{FE}	70-140	120-240	200-400

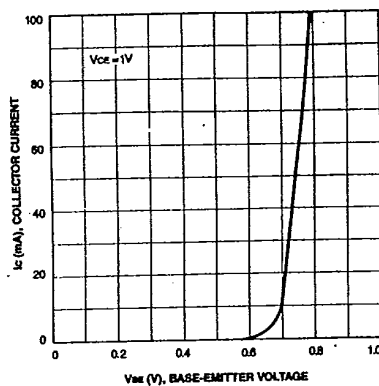
KSD227

NPN EPITAXIAL SILICON TRANSISTOR

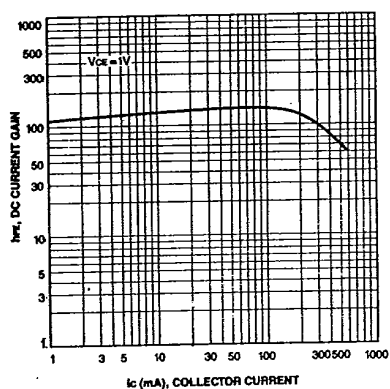
STATIC CHARACTERISTIC



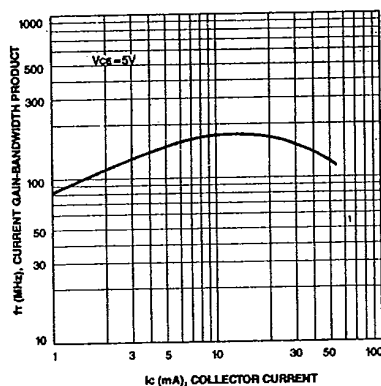
BASE-EMITTER ON VOLTAGE



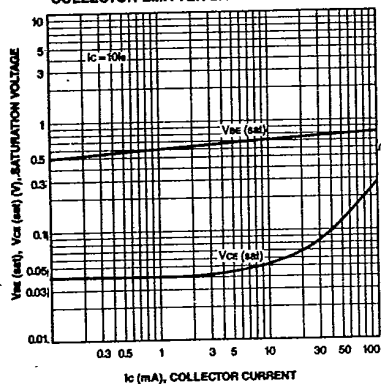
DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE

