

TO-92 Plastic-Encapsulate Transistors

FEATURES

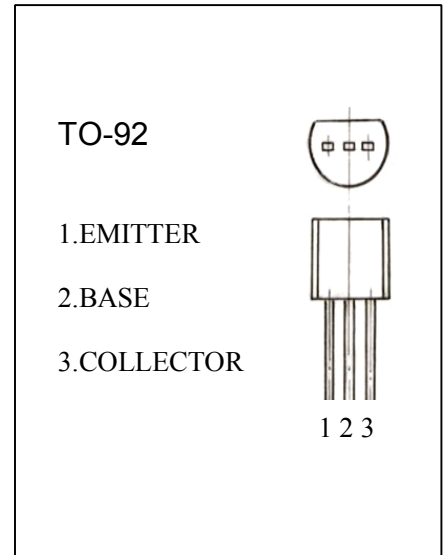
Power dissipation

PCM : 1 W (TA=25°C)

: 2 W (TC=25°C)

**MAXIMUM RATINGS** (TA=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
<b>VCBO</b>	Collector-Base Voltage	40	V
<b>VCEO</b>	Collector-Emitter Voltage	25	V
<b>VEBO</b>	Emitter-Base Voltage	5	V
<b>IC</b>	Collector Current -Continuous	1.5	A
<b>Tj</b>	Junction Temperature	150	°C
<b>Tstg</b>	Storage Temperature	-55-150	°C



**ELECTRICAL CHARACTERISTICS** (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
<b>Collector-base breakdown voltage</b>	V <sub>(BR)CBO</sub>	I <sub>c</sub> =100uA, I <sub>E</sub> =0	40			V
<b>Collector-emitter breakdown voltage</b>	V <sub>(BR)CEO</sub>	I <sub>c</sub> =0.1mA, I <sub>B</sub> =0	25			V
<b>Emitter-base breakdown voltage</b>	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100uA, I <sub>c</sub> =0	5			V
<b>Collector cut-off current</b>	I <sub>cBO</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0			0.1	uA
<b>Emitter cut-off current</b>	I <sub>CEO</sub>	V <sub>CE</sub> =20V, I <sub>E</sub> =0			0.1	uA
<b>Emitter cut-off current</b>	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>c</sub> =0			0.1	uA
<b>DC current gain</b>	h <sub>FE(1)</sub>	V <sub>CE</sub> =1V, I <sub>c</sub> =100mA	85		400	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =1V, I <sub>c</sub> =800mA	40			
<b>Collector-emitter saturation voltage</b>	V <sub>CE(sat)</sub>	I <sub>c</sub> =800mA, I <sub>B</sub> =80mA			0.5	V
<b>Base-emitter saturation voltage</b>	V <sub>BE(sat)</sub>	I <sub>c</sub> =800mA, I <sub>B</sub> =80mA			1.2	V
<b>Base-emitter voltage</b>	V <sub>BE</sub>	V <sub>CE</sub> =1V, I <sub>c</sub> =10mA			1	V
<b>Transition frequency</b>	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>c</sub> =50mA, f=30MHz	100			MHz

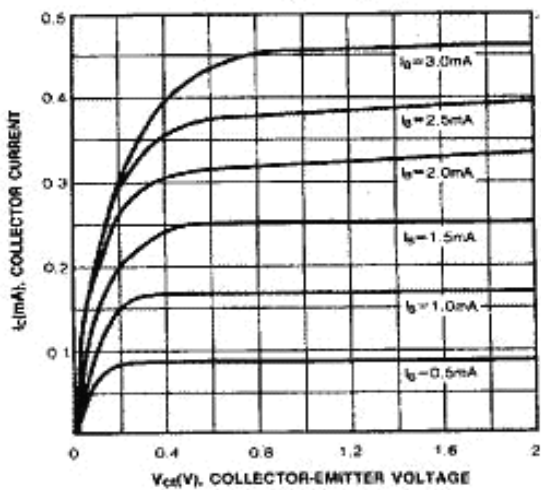
**CLASSIFICATION OF hFE(1)**

Rank	B	C	D	D3
<b>Range</b>	85-160	120-200	160-300	300-400

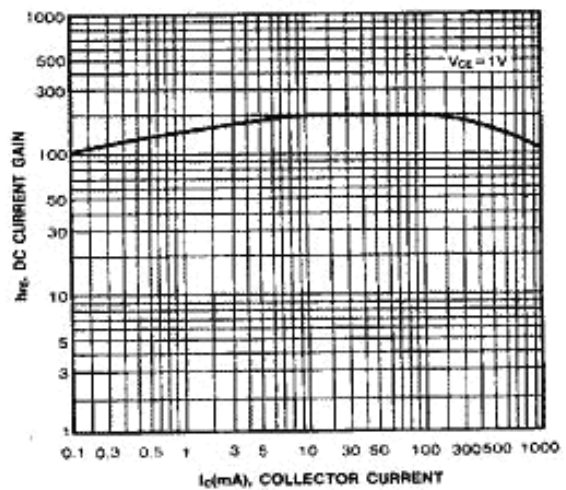
# Typical Characteristics

# SS8050

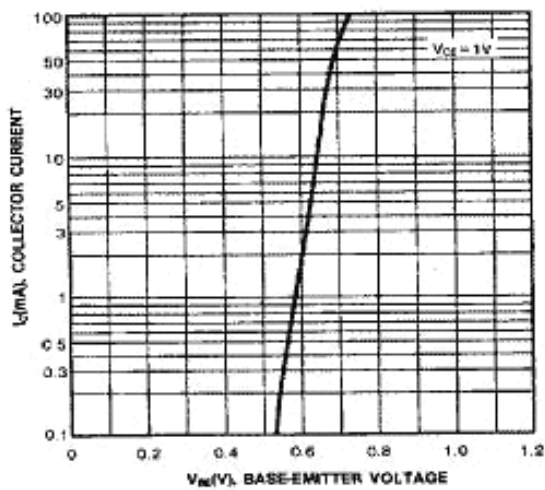
STATIC CHARACTERISTIC



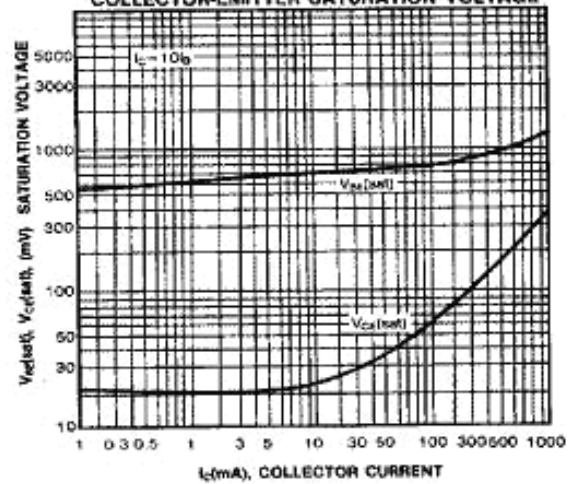
DC CURRENT GAIN



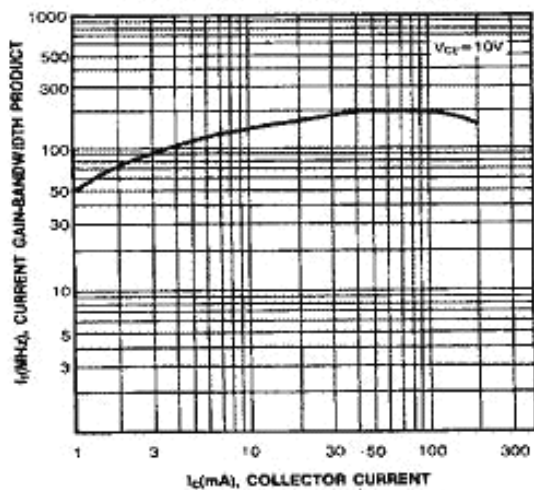
BASE-EMITTER ON VOLTAGE



BASE-EMITTER SATURATION VOLTAGE  
COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE

