S9015C

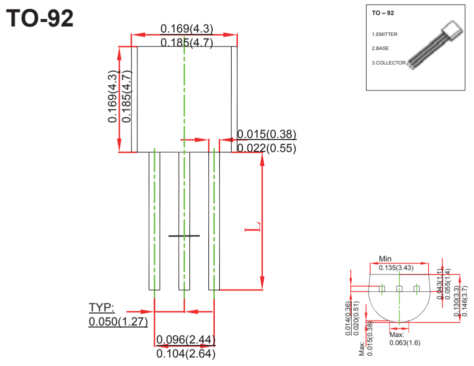
TO-92 Plastic-Encapsulate MOSFETS

Features

- High Total Power Dissipation (P_C = 0.45W)
- High hFE and Good Linearity
- Complementary to S9014
- PNP Transistors

MECHANICAL DATA

- Case style:TO-92molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	-50	V
V_{CEO}	Collector Emitter Voltage	-45	V
V_{EBO}	Emitter Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	450	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 ~ +150	°C

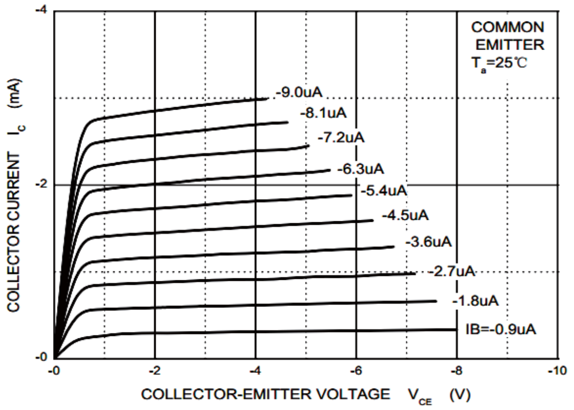
Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C = -100μA, I_E = 0	-50			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C = -1mA, I_B = 0	-45			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E = -100μA, I_C = 0	-5			V
I_{CBO}	Collector cut-off current	V_{CB} = -50V, I_E = 0			-50	nA
I_{EBO}	Emitter cut-off current	V_{EB} = -5V, I_C = 0			-50	nA
$h_{FE(1)}$	DC current gain	V_{CE} = -5V, I_C = -1mA	200		300	
$h_{FE(2)}$		V_{CE} = -5V, I_C = -10mA	90			
$h_{FE(3)}$		V_{CE} = -5V, I_C = -50mA	50			
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C = -100mA, I_B = -10mA			-0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C = -100mA, I_B = -10mA			-1.0	V
f_T	Transition frequency	V_{CE}=-5V, I_C=-10mA, f=30MHz	100			MHz

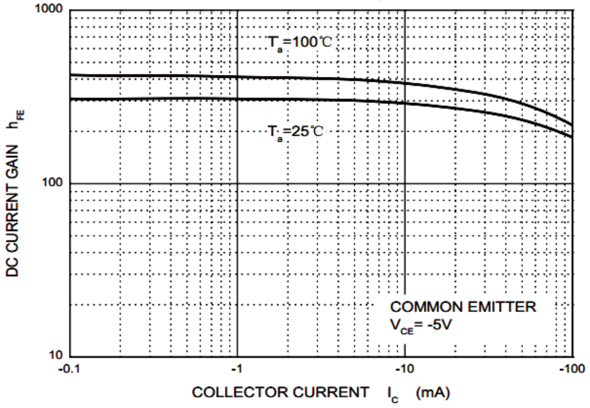
RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

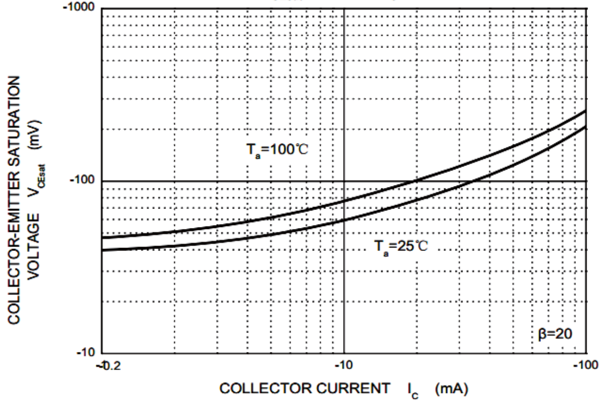
Static Characteristic



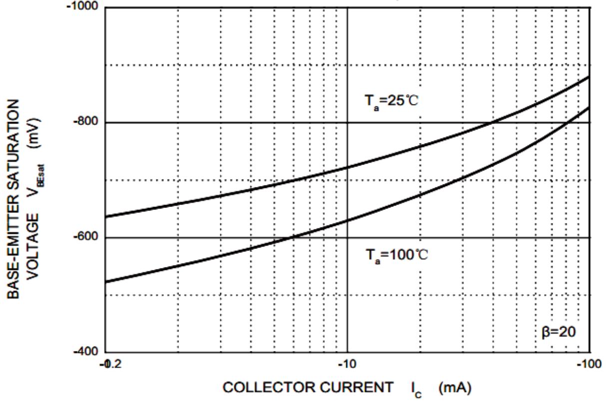
h_{FE} —— I_C



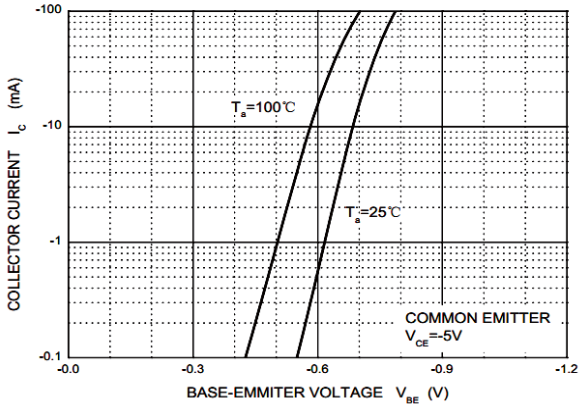
V_{CEsat} —— I_C



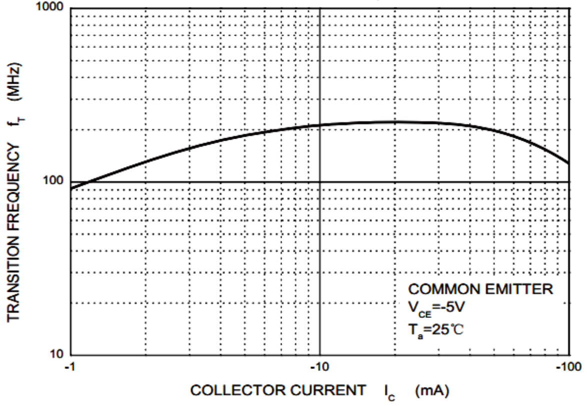
V_{BEsat} —— I_C



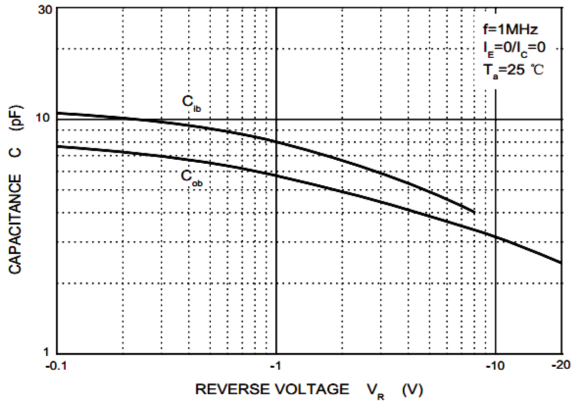
I_C —— V_{BE}



f_T —— I_C



C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



P_C —— T_a