

FEATURES

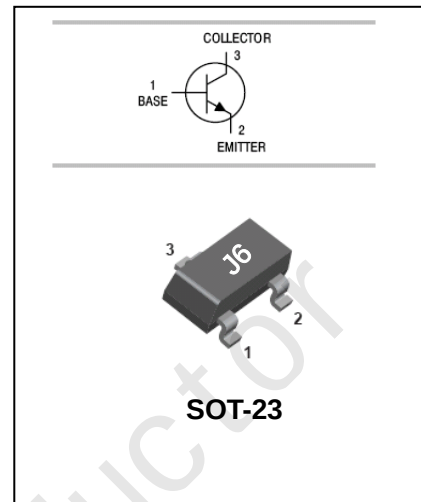
Complementary to S9015

Excellent h_{FE} linearity

Power dissipation ($P_C = 0.2W$)

APPLICATIONS

Per-Amplifier low level & low noise



MAXIMUM RATING @ $T_A=25^{\circ}C$ unless otherwise specified

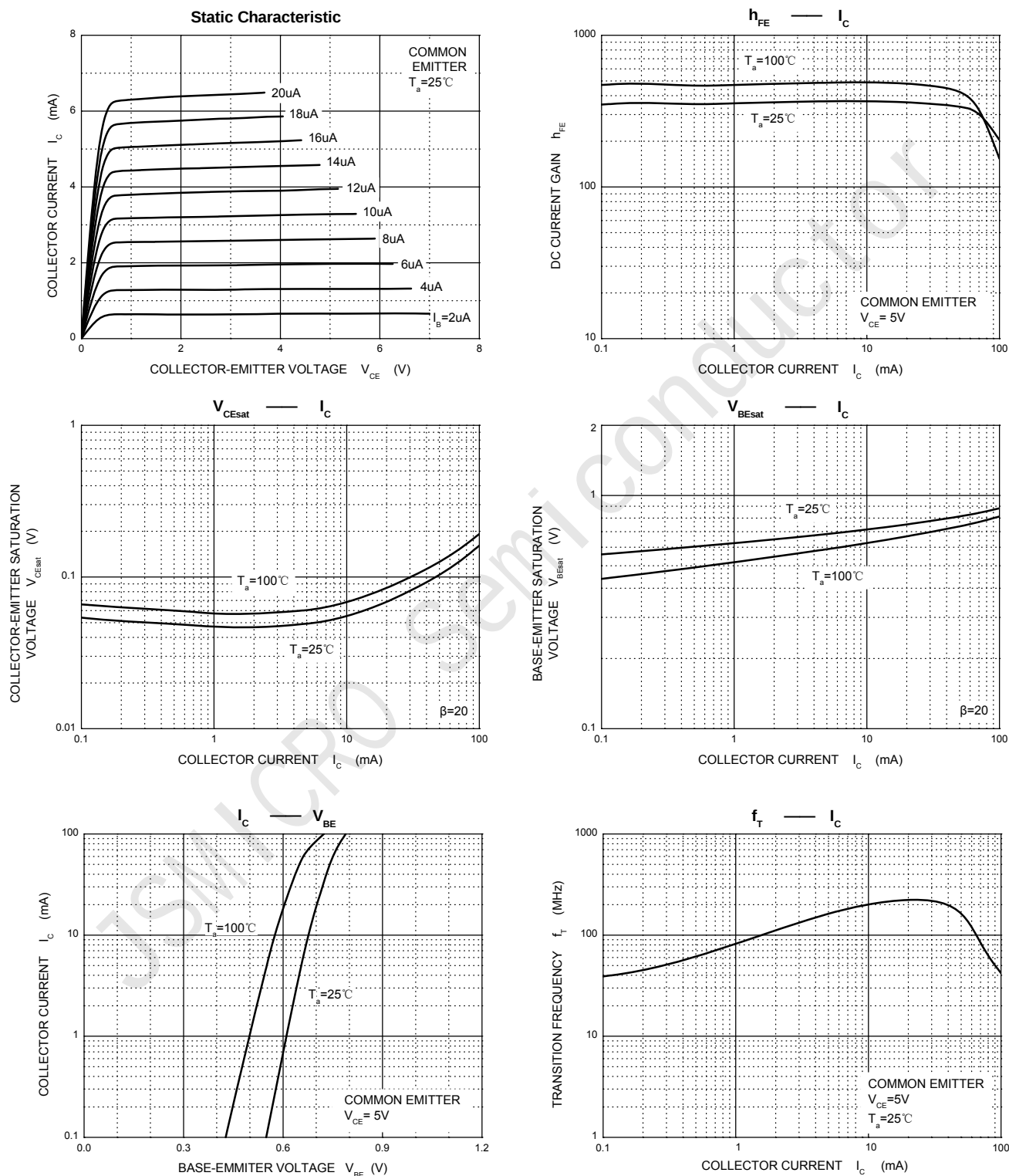
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	100	mA
P_C	Collector Dissipation	200	mW
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

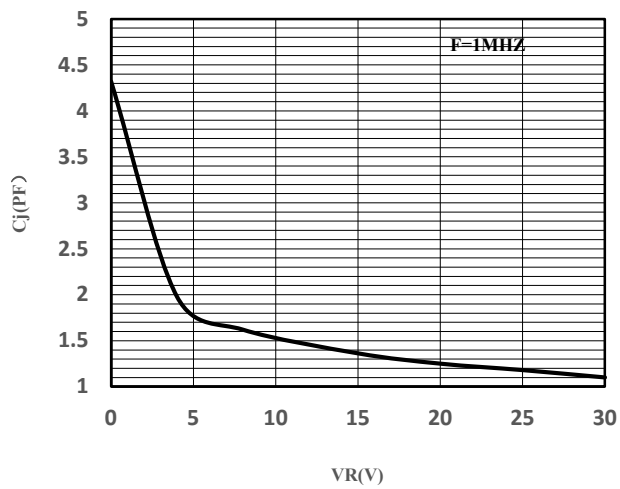
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1mA, I_B=0$	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=35V, I_B=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	200		1000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=5mA$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=5mA$			1	V
Base-emitter on voltage	$V_{BE(on)}$	$V_{CE}=5V, I_C=2mA$			0.7	V
Output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$			3.5	pF
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA$ $f=30MHz$		150		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	200-450	450-1000

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified


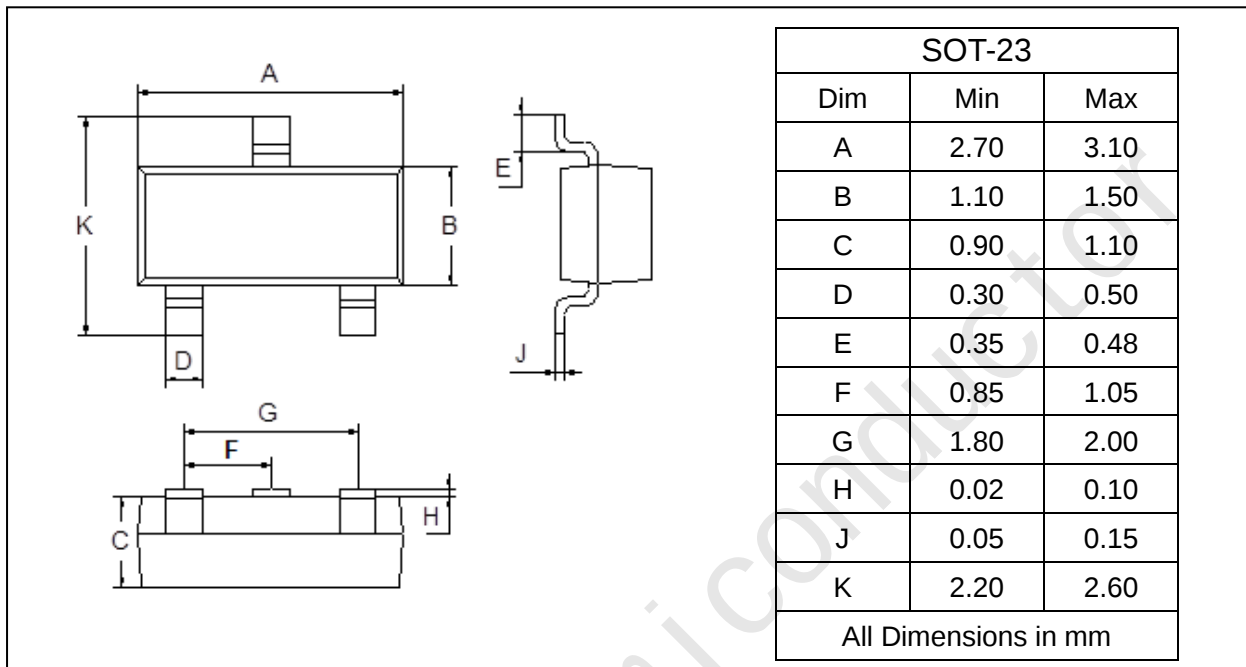
$C_{ob} - V_{CB}$



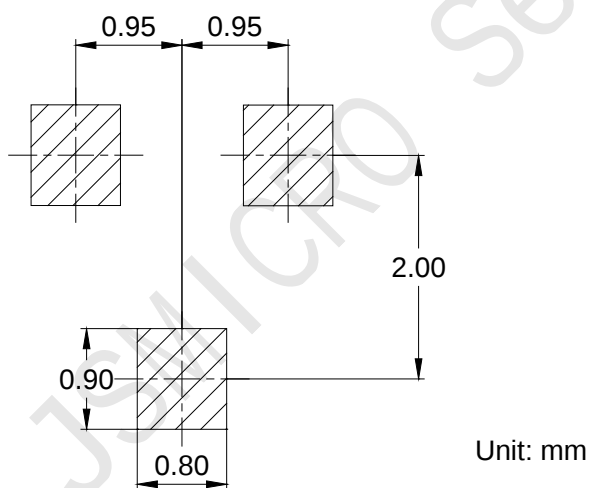
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
S9014	SOT-23	3000pcs / Tape & Reel