

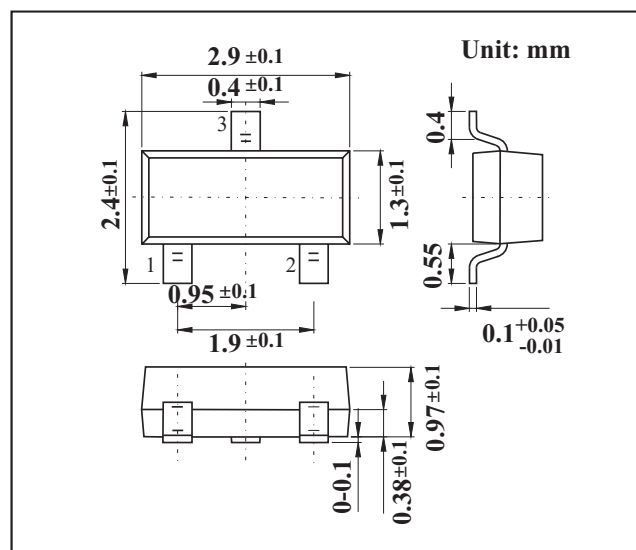
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- High DC current gain
- High emitter-base voltage
- Low VCE (sat)

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	25	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	12	V
Collector current	I_C	0.5	A
		1	
Collector power dissipation	P_C	0.2	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

* Single pulse $P_w=100ms$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$B_{V_{CBO}}$	$I_C=10\mu A$	25			V
Collector-emitter breakdown voltage	$B_{V_{CEO}}$	$I_C=1mA$	20			V
Emitter-base breakdown voltage	$B_{V_{EBO}}$	$I_E=10\mu A$	12			V
Collector cutoff current	I_{CBO}	$V_{CB}=20V$			0.5	A
Emitter cutoff current	I_{EBO}	$V_{EB}=10V$			0.5	A
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=500mA/20mA$		0.18	0.4	V
DC current transfer ratio	h_{FE}	$V_{CE}=3V, I_C=10mA$	820		2700	
Output capacitance	f_T	$V_{CE}=10V, I_E=-50mA, f=100MHz$		350		MHz
Transition frequency	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		8.0		pF
Output On-resistance	R_{on}	$I_B=1mA, V_i=100mV(rms), f=1kHz$		0.8		

*Measured using pulse current

RATINGS AND CHARACTERISTIC CURVES

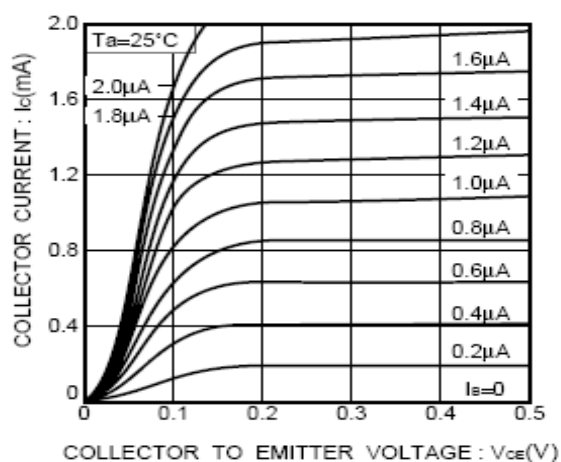


Fig.1 Grounded emitter output characteristics

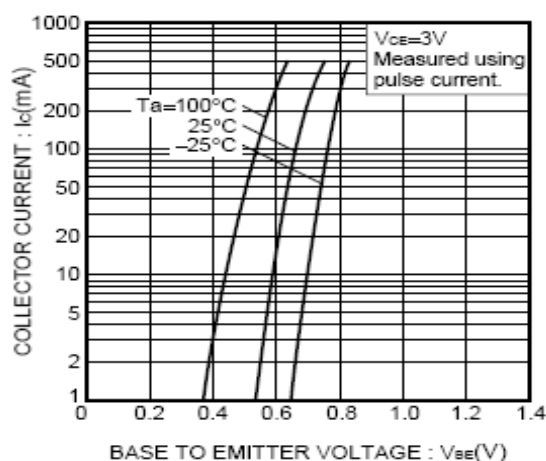


Fig.2 Grounded emitter propagation characteristics

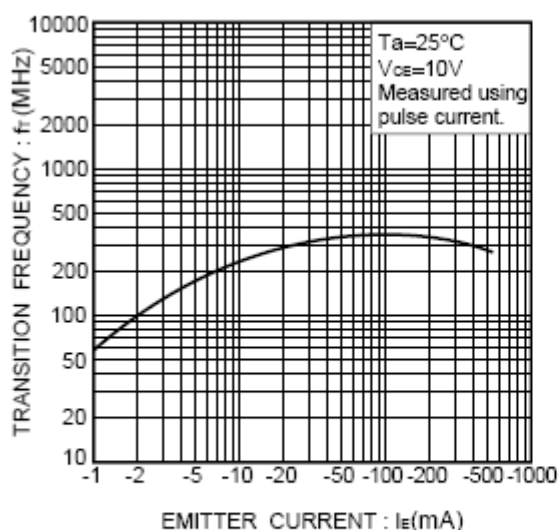


Fig.3 Gain bandwidth product vs. emitter current

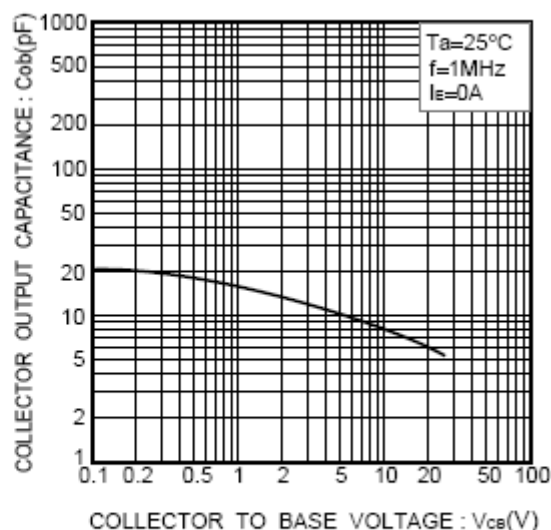


Fig.4 Collector output capacitance vs. collector-base voltage

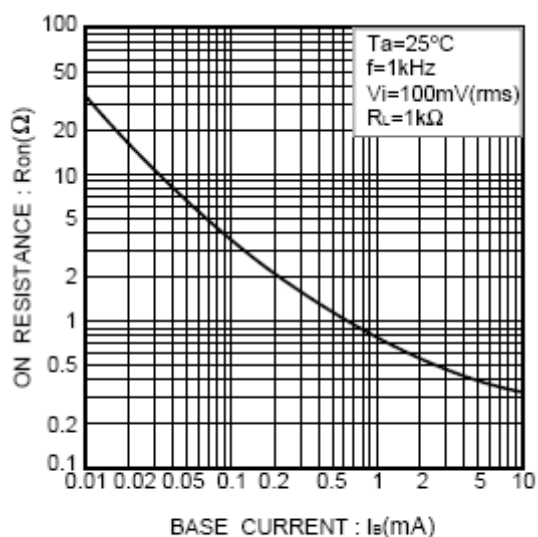


Fig.5 Output-on resistance vs. base current