FEATURE

Power dissipation

P_{CM} : 0.625 W Tamb=25℃

Collector current

I_{CM}: 0.5 A

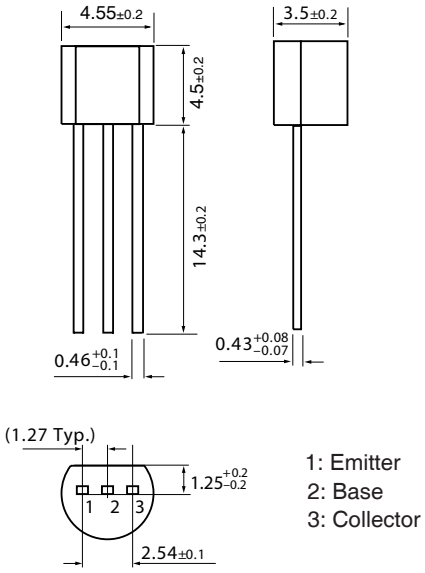
Collector-base voltage

$V_{(BR)CBO}$: 40 V

Operating and storage junction temperature range

Tj, T_{stg}: -55 to +150℃

TO-92



1: Emitter
2: Base
3: Collector

ELECTRICAL CHARACTERISTICS（Tamb=25℃ unless otherwise specified）

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= 100μA， I_E=0	40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	I_C= 1 mA， I_B=0	25			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 100μA， I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}= 40V， I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=20V， I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V, I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C=50mA	64		300	
	$h_{FE(2)}$	V_{CE}=1V, I_C= 500mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 500 mA, I_B= 50mA			0.6	V
Base-emitter voltage	$V_{BE(sat)}$	I_C= 500 mA, I_B= 50mA			1.2	V
Transition frequency	f_T	V_{CE}=6V,I_C=20mA, f=30MHz	150			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	D	E	F	G	H	I
Range	64-91	78-112	96-135	112-166	144-202	190-300

Typical Characteristics

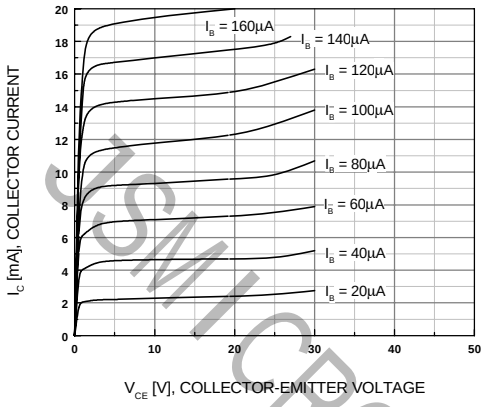


Figure 1. Static Characteristic

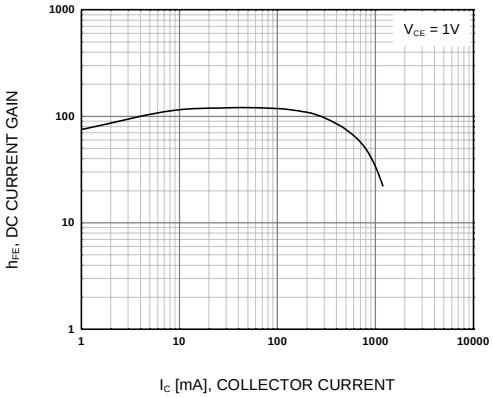


Figure 2. DC current Gain

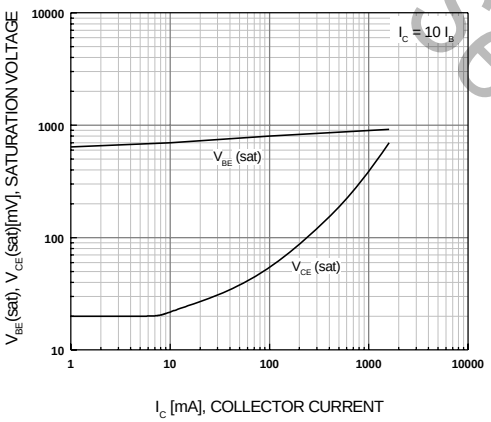


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

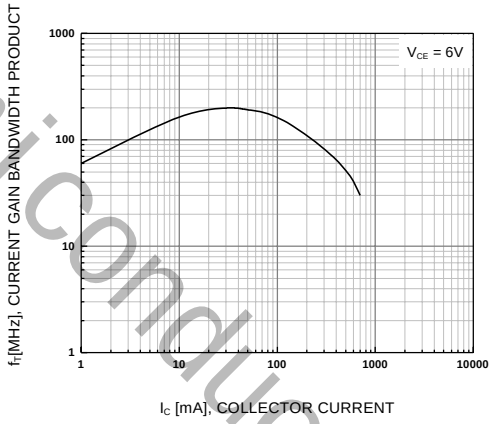


Figure 4. Current Gain Bandwidth Product