



SEMICONDUCTOR

**S9012LT1**

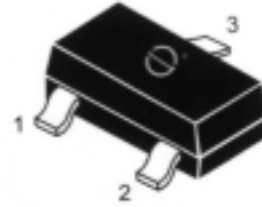
Shandong Yiguang Electronic Joint stock Co., Ltd

**TECHNICAL DATA**

PNP EPITAXIAL SILICON TRANSISTOR

- \* Complement to S9013LT1
- \* Collector Current :Ic= -500mA
- \* High Total Power Dissipation :Pc=225mW

Package:SOT-23

**ABSOLUTE MAXIMUM RATINGS at Ta=25**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	-40	V
Collector-Emitter Voltage	Vceo	-20	V
Emitter-Base Voltage	Veb	-5	V
Collector Current	Ic	-500	mA
Collector Dissipation Ta=25 *	P <sub>D</sub>	225	mW
Junction Temperature	T <sub>j</sub>	150	
Storage Temperature	T <sub>stg</sub>	-55-150	

PIN:	1	2	3
STYLE			
NO.1	B	E	C

**ELECTRICAL CHARACTERISTICS at Ta=25**

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	-40			V	Ic=-100uA Ie=0
Collector-Emitter Breakdown Voltage#	BVceo	-20			V	Ic= -1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	-5			V	Ie= -100uA Ic=0
Collector-Base Cutoff Current	Icbo			-100	nA	Vcb= -25V Ie=0
Emitter-Base Cutoff Current	Iebo			-100	nA	Veb= -3V Ic=0
DC Current Gain	Hfe <sub>1</sub>	64	120	300		Vce= -1V Ic= -50mA
DC Current Gain	Hfe <sub>2</sub>	30				Vce= -1V Ic= -500mA
Collector-Emitter Saturation Voltage	Vce(sat)		-0.18	-0.6	V	Ic= -500mA Ib= -50mA
Base-Emitter Saturation Voltage	Vbe(sat)		-0.95	-1.2	V	Ic= -500mA Ib= -50mA
Base-Emitter On Voltage	Vbe(on)	-0.6	-0.67	-0.7	V	Vce= -1V Ic= -10mA

\* Total Device Dissipation : FR=1x0.75x0.062in Board,Derate 25 .

# Pulse Test : Pulse Width 300uS,Duty cycle 2%

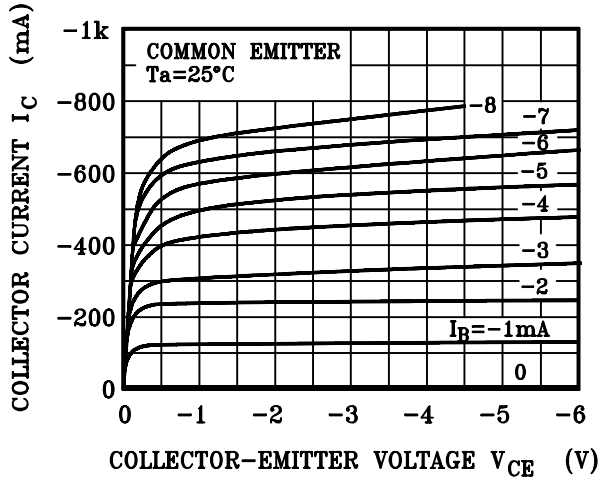
DEVICE MARKING:

S9012LT1=J6

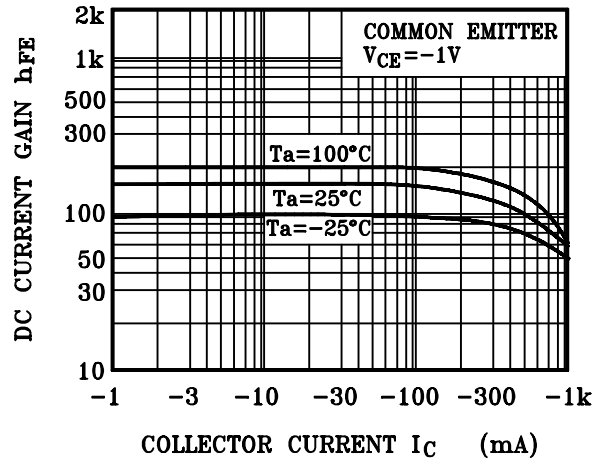


# S9012LT1

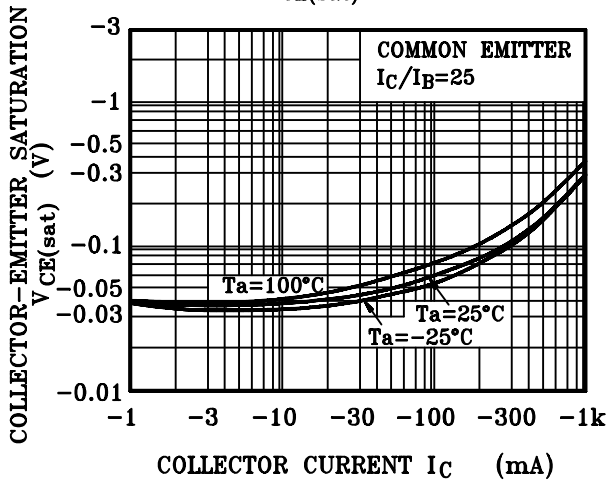
$I_C - V_{CE}$



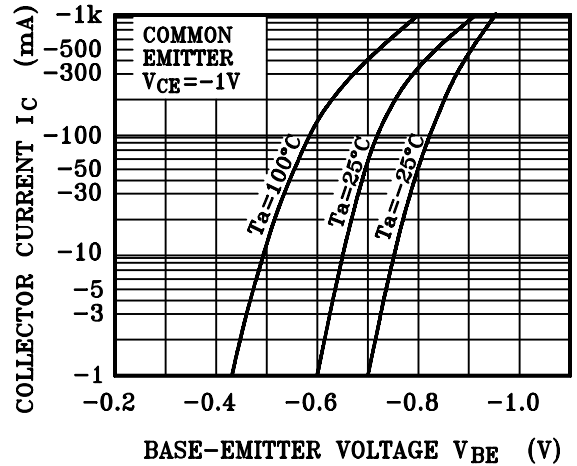
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$P_C - T_a$

