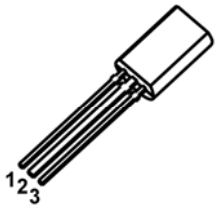
2SC2655

TRANSISTOR (NPN)

FEATURES

- Low Saturation Voltage: $V_{CE(sat)}$=0.5V(Max)(I_C=1A)
- High Speed Switching Time: t_{stg}=1μs(Typ.)
- Complementary to 2SA1020

TO-92L



MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Symbol	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current –Continuous	2	A
P_C	Collector Power Dissipation	0.9	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

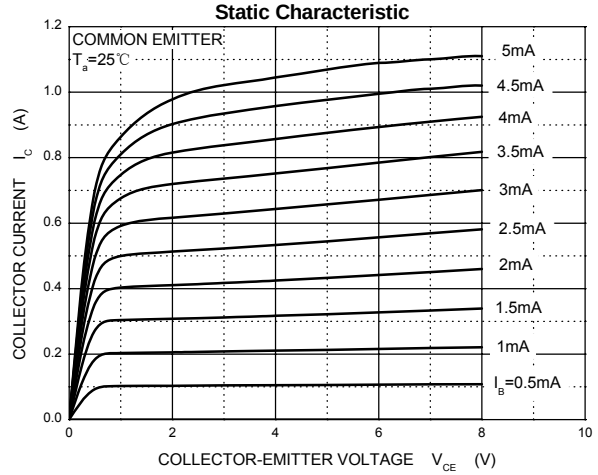
Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage		$V_{(BR)CBO}$	I_C=100μA,I_E=0	50			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	I_C=10mA,I_B=0	50			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current		I_{CBO}	V_{CB}=50V,I_E=0			1	μA
Emitter cut-off current		I_{EBO}	V_{EB}=5V,I_C=0			1	μA
DC current gain		$h_{FE(1)}$	V_{CE}=2V,I_C=500mA	70		240	
		$h_{FE(2)}$	V_{CE}=2V,I_C=1.5A	40			
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=1A,I_B=0.05A			0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$	I_C=1A,I_B=0.05A			1.2	V
Transition frequency		f_T	V_{CE}=2V,I_C=0.5A		100		MHz
Collector output capacitance		C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		30		pF
Switch time	Tune on Time	t_{on}	V_{CC}=30V,Ic=1A, I_{B1}=-I_{B2}=0.05A		0.15		μs
	Storage Time	t_{stg}			2		
	Fall Time	t_f			0.15		

CLASSIFICATION OF $h_{FE(1)}$

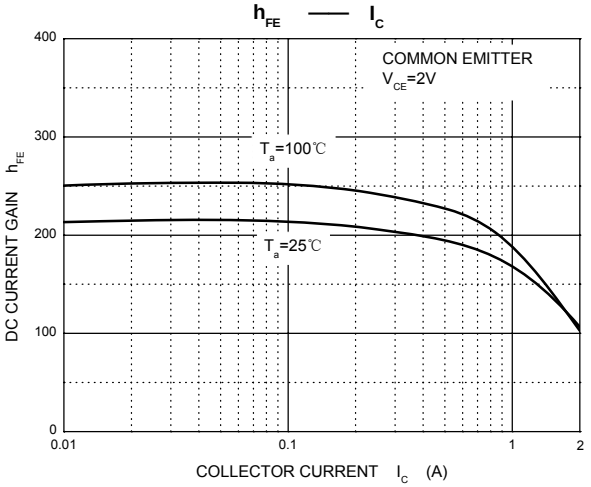
Rank	O	Y
Range	70-140	120-240

Typical Characteristics

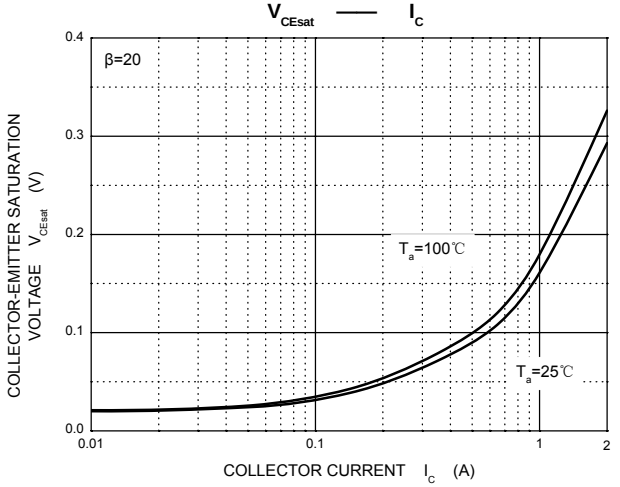
Static Characteristic



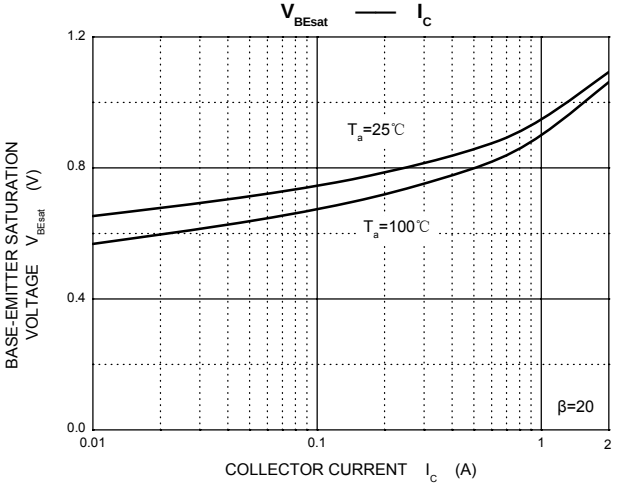
h_{FE} —— I_C



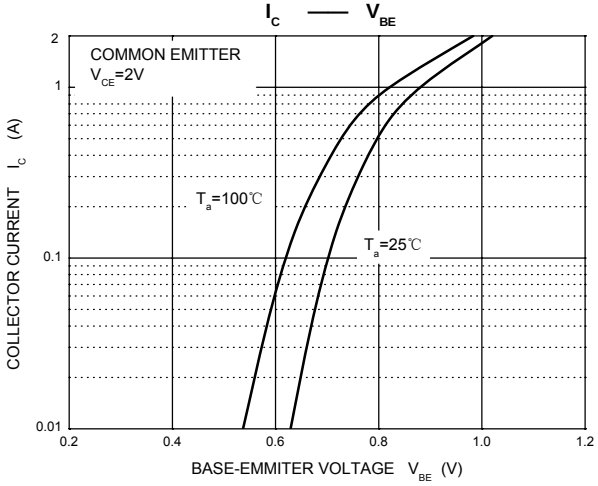
V_{CEsat} —— I_C



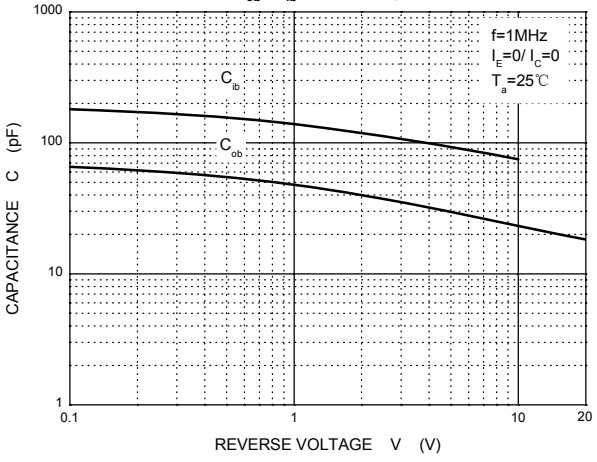
V_{BEsat} —— I_C



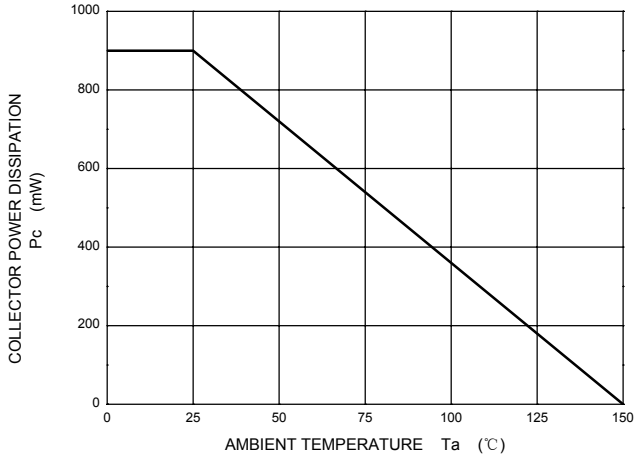
I_C —— V_{BE}



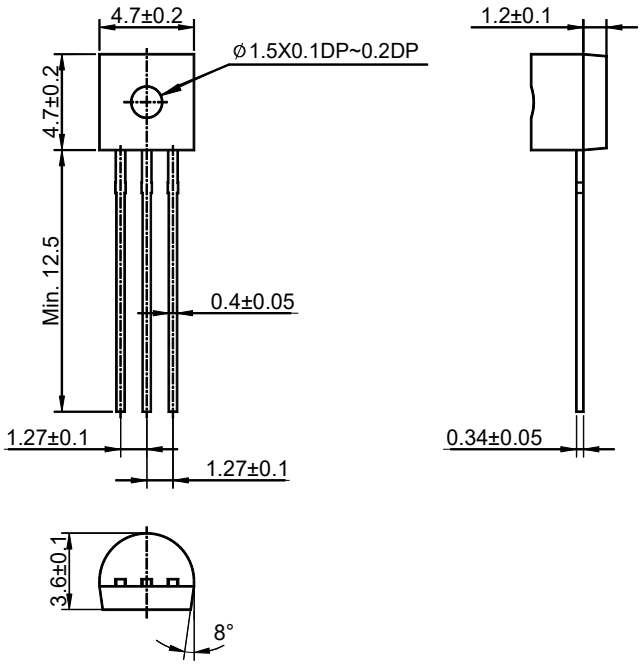
C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



Pc —— Ta



TO-92 Package Outline (Dimensions in millimeters)



TO-92 Ammo-Pack Outline (Dimensions in millimeters)

