

**Descriptions**

- General purpose application
- Switching application

**Features**

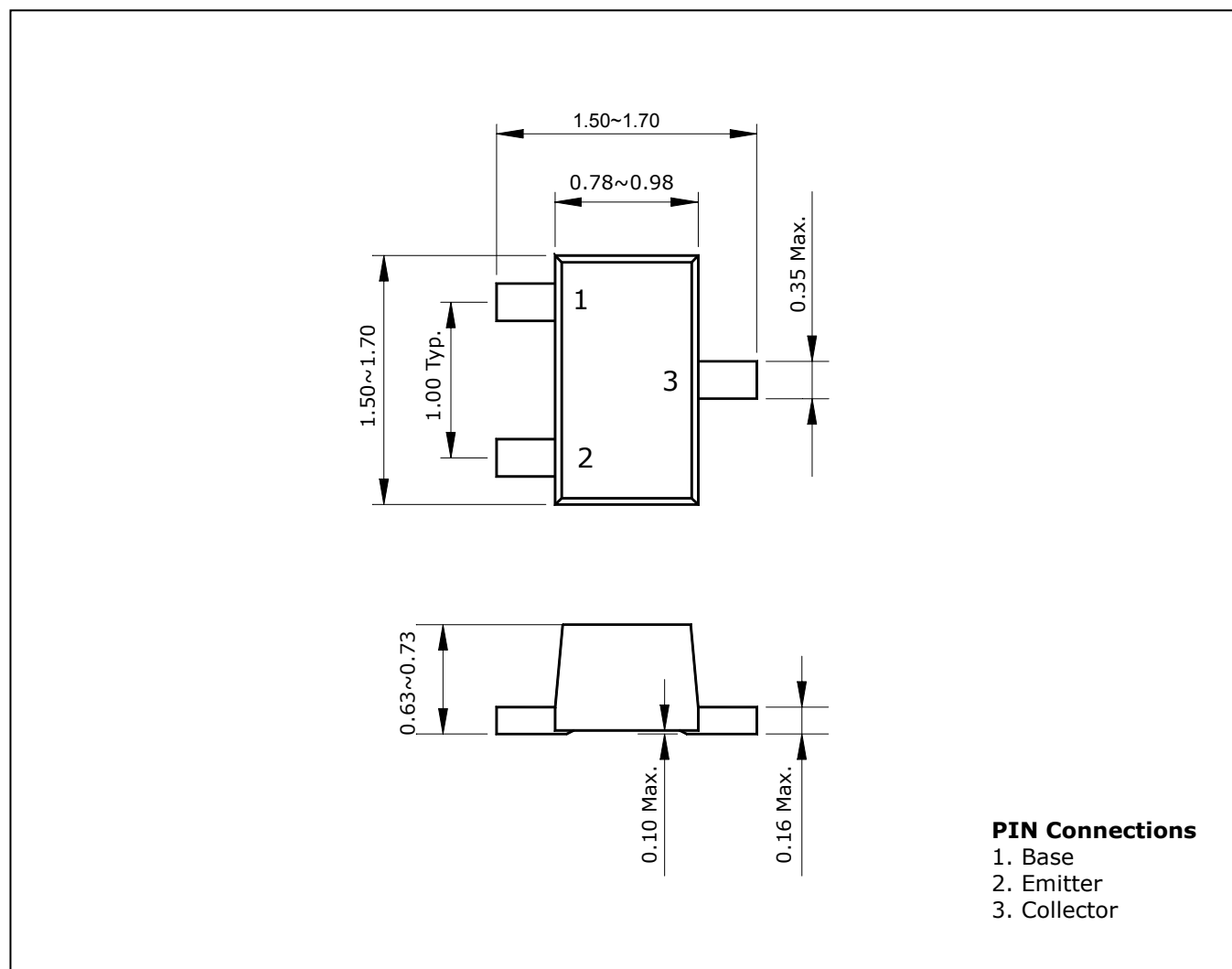
- Large collector current
- Low collector saturation voltage

**Ordering Information**

Type NO.	Marking	Package Code
STN2907AEF	GT	SOT-523F

**Outline Dimensions**

unit : mm



**Absolute Maximum Ratings**

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base voltage	$V_{CBO}$	-55	V
Collector-Emitter voltage	$V_{CEO}$	-50	V
Emitter-Base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-600	mA
Collector Power dissipation	$P_C^*$	150	mW
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{stg}$	-55~150	°C

\* : Package mounted on 99.5% Alumina 10×8×0.1mm.

**Electrical Characteristics**

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C=-10mA, I_B=0$	-50	-	-	V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-55V, I_E=0$	-	-	-10	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5V, I_E=0$	-	-	-10	nA
DC current gain	$h_{FE}$	$V_{CE}=-10V, I_C=-10mA$	75	-	-	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=-150mA, I_B=-15mA$	-	-	-0.4	V
Transition frequency	$f_T$	$V_{CE}=-5V, I_C=-20mA$	250	-	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$	-	6.0	-	pF

Electrical Characteristic Curves

Fig. 1  $P_C - T_a$

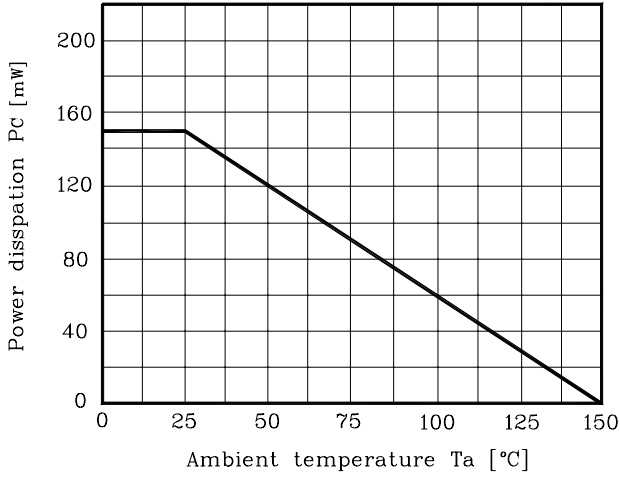


Fig. 2  $I_C - V_{BE}$

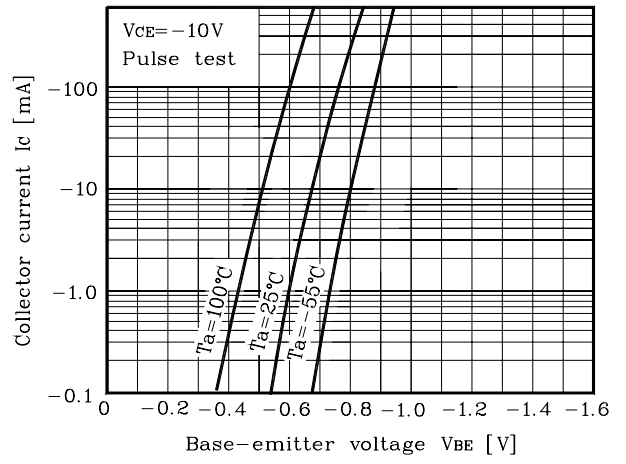


Fig. 3  $I_C - V_{CE}$

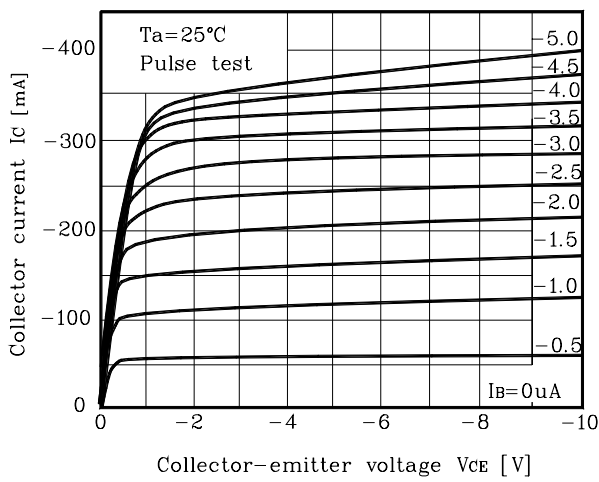


Fig. 4  $V_{CE(sat)} - I_C$

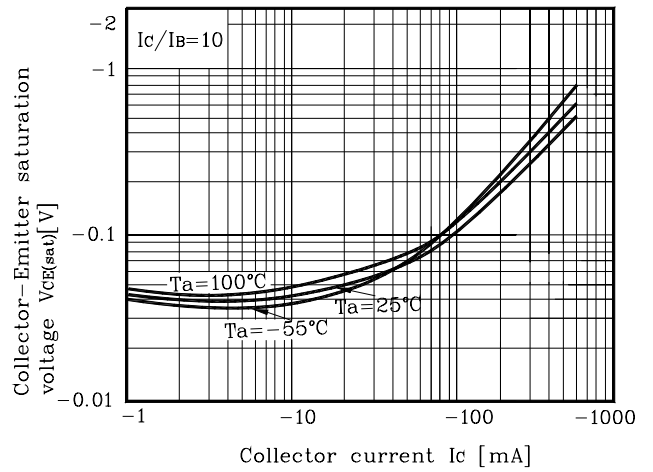


Fig. 5  $h_{FE} - I_C$

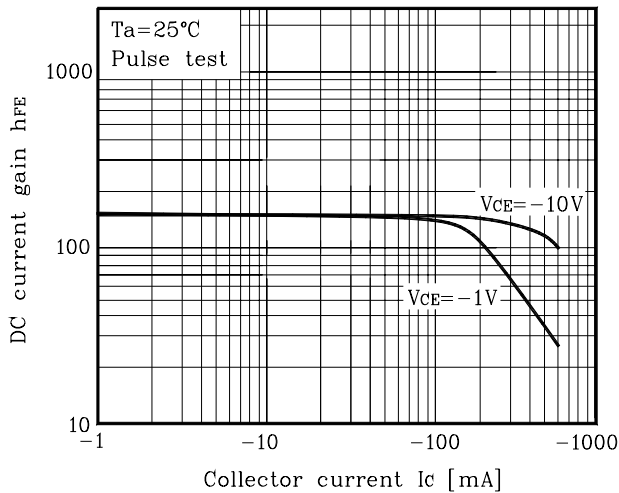
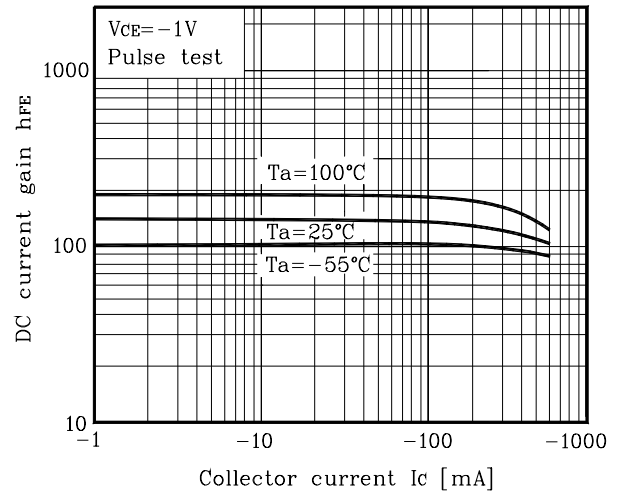


Fig. 6  $h_{FE} - I_C$



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