WILLAS

RoHS COMPLIANT

General Purpose Transistors

8550xLT1

PNP Silicon

FEATURE

We declare that the material of product compliance with RoHS requirements.

Pb-Free package is available

RoHS product for packing code suffix ”G”

Halogen free product for packing code suffix “H”

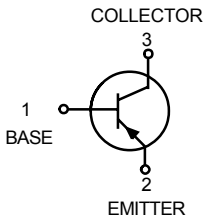
SOT– 23

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
8550PLT1	85P	3000/Tape&Reel
8550QLT1	1YD	3000/Tape&Reel
8550RLT1	1YF	3000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	25	V
Collector-Base voltage	V_{CBO}	40	V
Emitter-base Voltage	V_{EBO}	5	V
Collector current-continuoun	I_C	800	mAdc



THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR- 5 Board (1)	P_D		
T_A = 25 °C		225	mW
Derate above 25 °C		1.8	mW /°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Total Device Dissipation	P_D		
Alumina Substrate, (2) T_A = 25 °C		300	mW
Derate above 25 °C		2.4	mW /°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	°C/W
Junction and Storage Temperature	T_J , T_{stg}	-55 to +150	°C

DEVICE MARKING

8550QLT1 = 1YD 8550PLT1 =85P

ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage (I_C = 1.0mA)	$V_{(BR)CEO}$	25	–	–	V
Emitter-Base Breakdown Voltage (I_E = 100μA)	$V_{(BR)EBO}$	5	–	–	V
Collector-Base Breakdown voltage (I_C= 100μA)	$V_{(BR)CBO}$	40	–	–	V
Collector Cutoff Current (V_{CB} = 35 V)	I_{CBO}	–	–	150	nA
Emitter Cutoff Current (V_{EB} =4V)	I_{EBO}	–	–	150	nA

1. FR-5 = 1.0 x 0.75 x 0.062 in.
2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

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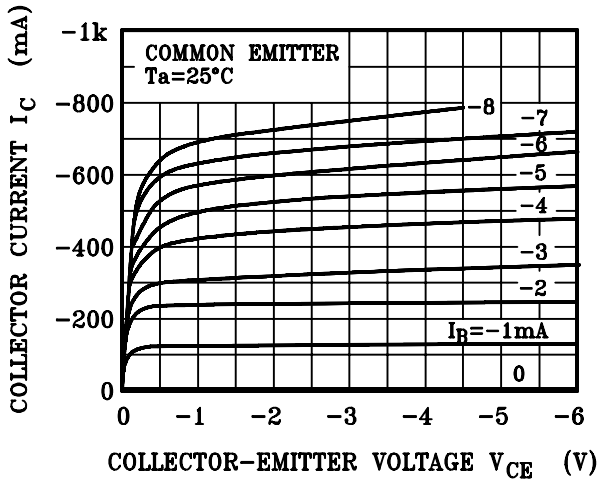
ON CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
DC Current Gain (I_C =100mA V_{CE}=1V)	h_{FE}	100	–	400	
Collector-Emitter Saturation Voltage (I_C =800mA I_B=80mA)	$V_{CE(S)}$	–	–	0.5	V

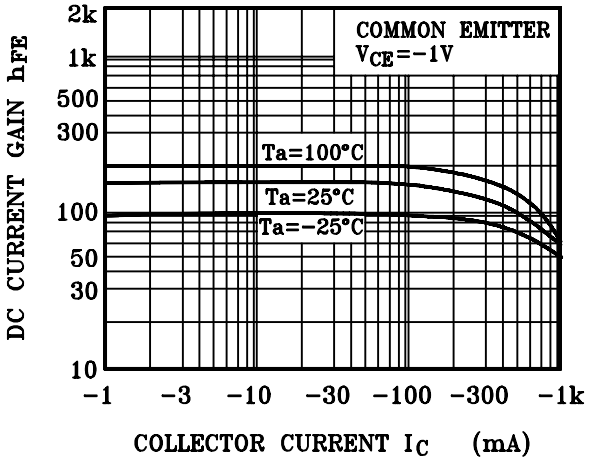
NOTE:

*	P	Q	R
h_{FE}	100~200	150~300	200~400

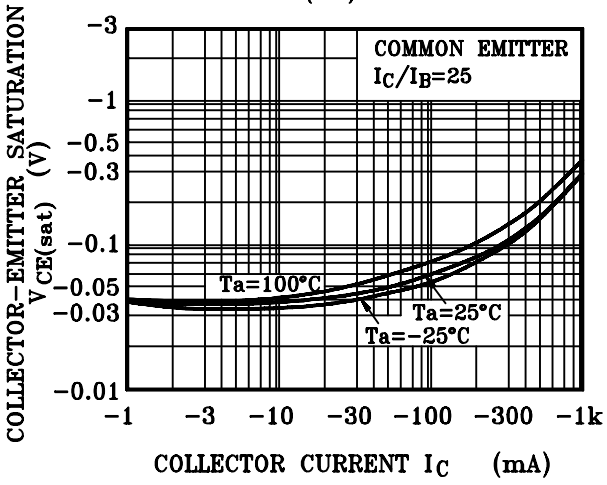
I_C – V_{CE}



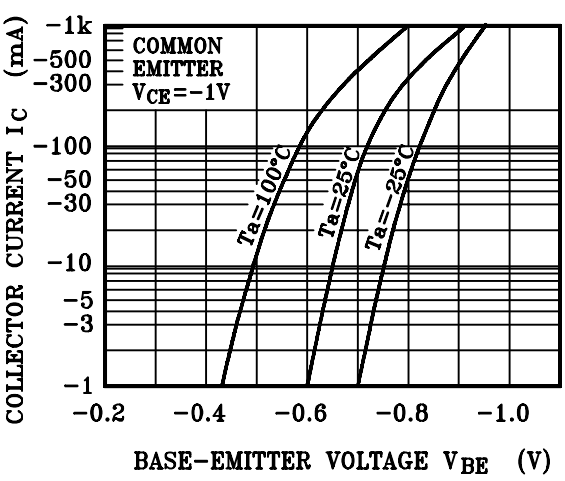
h_{FE} – I_C



$V_{CE(sat)}$ – I_C



I_C – V_{BE}



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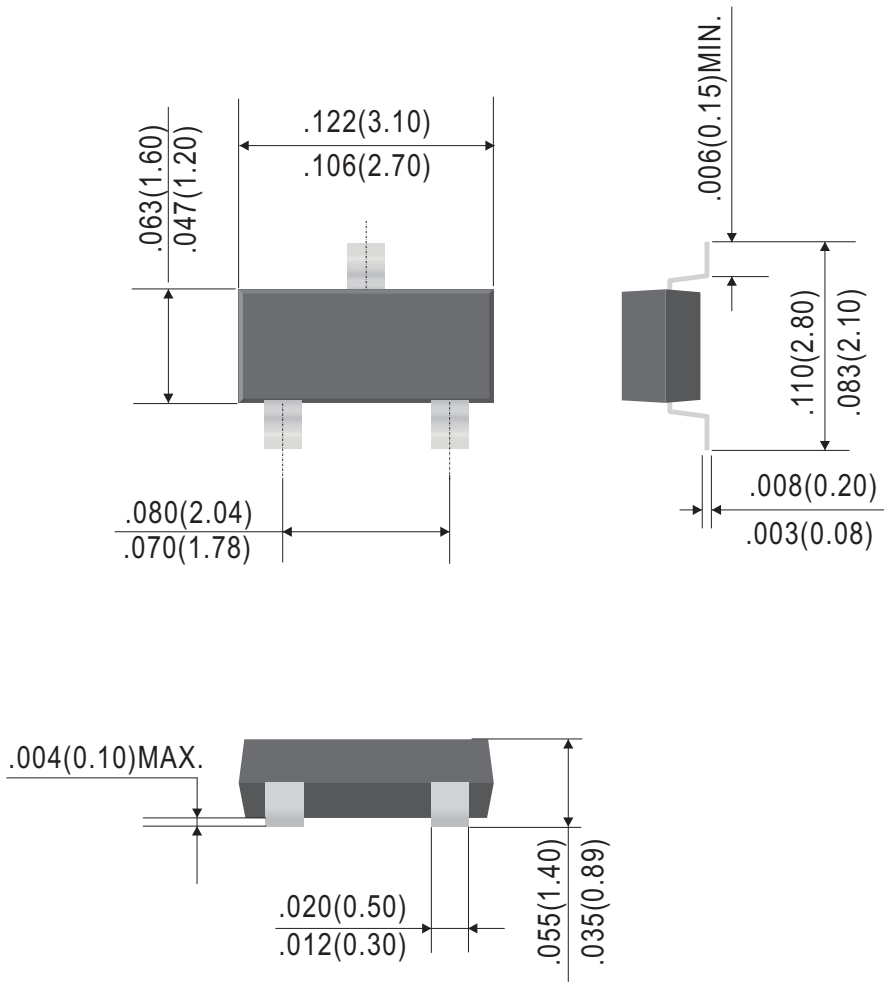

Dimensions in inches and (millimeters)