

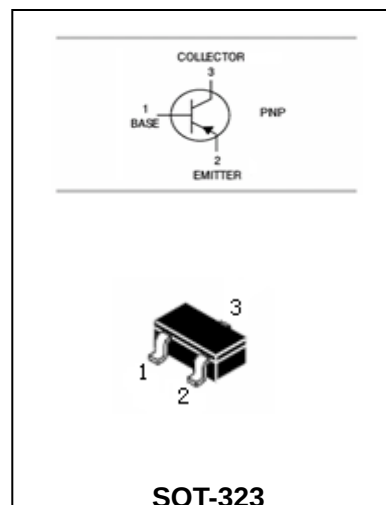
Silicon Epitaxial Planar Transistor

S8550W

FEATURES

- High collector current ($I_C = -500\text{mA}$)
- Complementary to S8050W
- Excellent H_{FE} linearity
- RoHS compliant with Halogen-free

HF



APPLICATIONS

- High collector current

ORDERING INFORMATION

Type No.	Marking	Package Code
S8550W-L	2TY	SOT-323
S8550W-H	2TY	SOT-323

MAXIMUM RATING @ $T_a = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_C	Collector Dissipation	300	mW
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

Silicon Epitaxial Planar Transistor

S8550W

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1V, I_C = -50mA$	120	350		
		$V_{CE} = -1V, I_C = -500mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20mA$ $f = 30MHz$	150			MHz

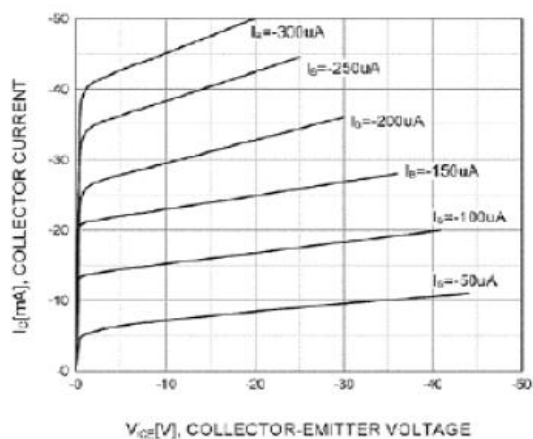
CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	120-200	200-350

Silicon Epitaxial Planar Transistor

S8550W

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



Static Characteristic



DC current Gain

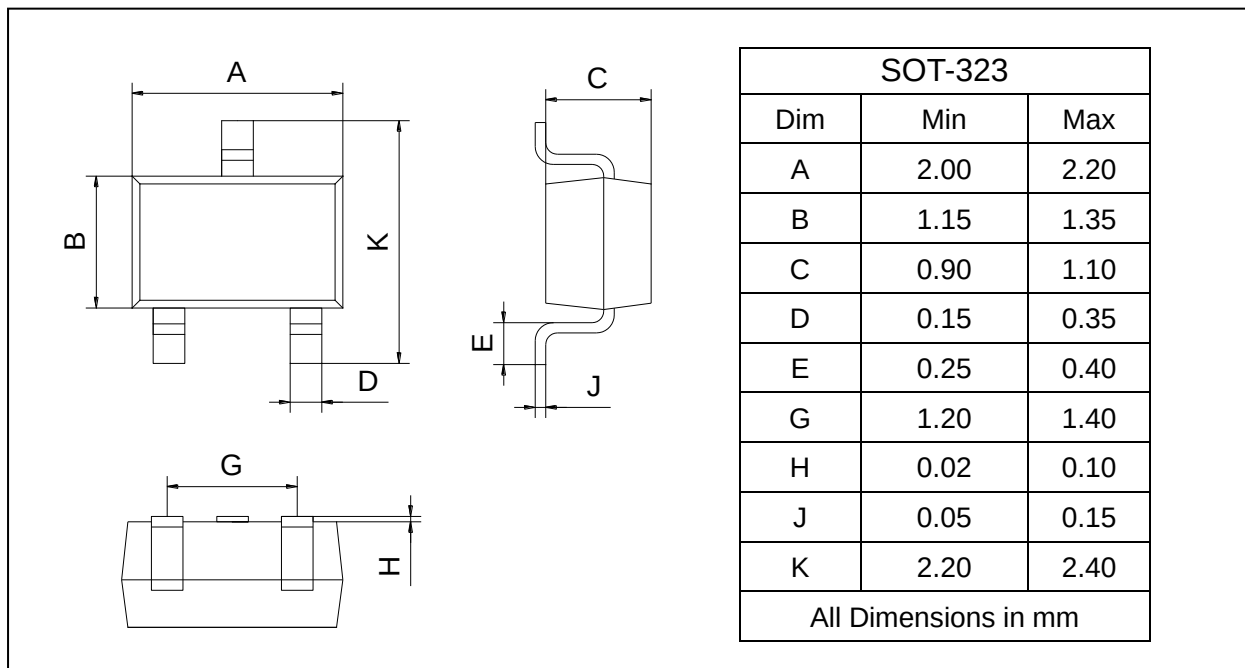
Silicon Epitaxial Planar Transistor

S8550W

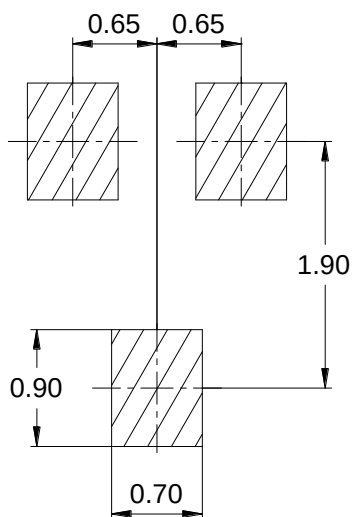
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
S8550W	SOT-323	3000 pcs / Tape & Reel