

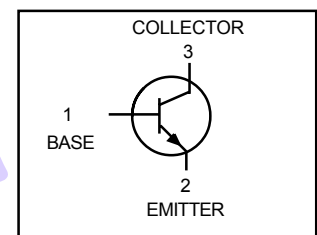


# General Purpose Transistors

## NPN Silicon

### FEATURE

- High current capacity in compact package.  
 $I_C = 1.5A$ .
- Epitaxial planar type.
- NPN complement: 8050H
- 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"  
Moisture Sensitivity Level 1



### DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
8050HPLT1	1HA	3000/Tape&Reel
8050HQLT1	1HC	3000/Tape&Reel
8050HRLT1	1HE	3000/Tape&Reel
8050HSLT1	1HG	3000/Tape&Reel

### MAXIMUM RATINGS

Rating	Symbol	Max	Unit
Collector-Emitter Voltage	$V_{CEO}$	25	V
Collector-Base Voltage	$V_{CBO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current-continuous	$I_C$	1500	mAdc

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,(1) $T_A = 25^\circ C$ Derate above $25^\circ C$	$P_D$	225 1.8	mW mW/°C
Thermal Resistance,Junction to Ambient	$R_{\theta JA}$	556	°C/W
Total Device Dissipation Alumina Substrate,(2) $T_A = 25^\circ C$ Derate above $25^\circ C$	$P_D$	300 2.4	mW 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



### General Purpose Transistors

#### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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#### OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage (I <sub>C</sub> =1.0mA)	V <sub>(BR)CEO</sub>	25	-	-	V
Emitter-Base Breakdown Voltage (I <sub>E</sub> =100μA)	V <sub>(BR)EBO</sub>	5	-	-	V
Collector-Base Breakdown Voltage (I <sub>C</sub> =100μA)	V <sub>(BR)CBO</sub>	40	-	-	V
Collector Cutoff Current (V <sub>CB</sub> =35V)	I <sub>CBO</sub>	-	-	150	nA
Emitter Cutoff Current (V <sub>EB</sub> =4V)	I <sub>EBO</sub>	-	-	150	nA

#### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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#### ON CHARACTERISTICS

DC Current Gain I <sub>C</sub> =100mA, V <sub>CE</sub> =1V	h <sub>FE</sub>	100	-	600	
Collector-Emitter Saturation Voltage (I <sub>C</sub> =800mA I <sub>B</sub> =80mA)	V <sub>CE(S)</sub>	-	-	0.5	V

#### NOTE :

*	P	Q	R	S
h <sub>FE</sub>	100~200	150~300	200~400	300~600



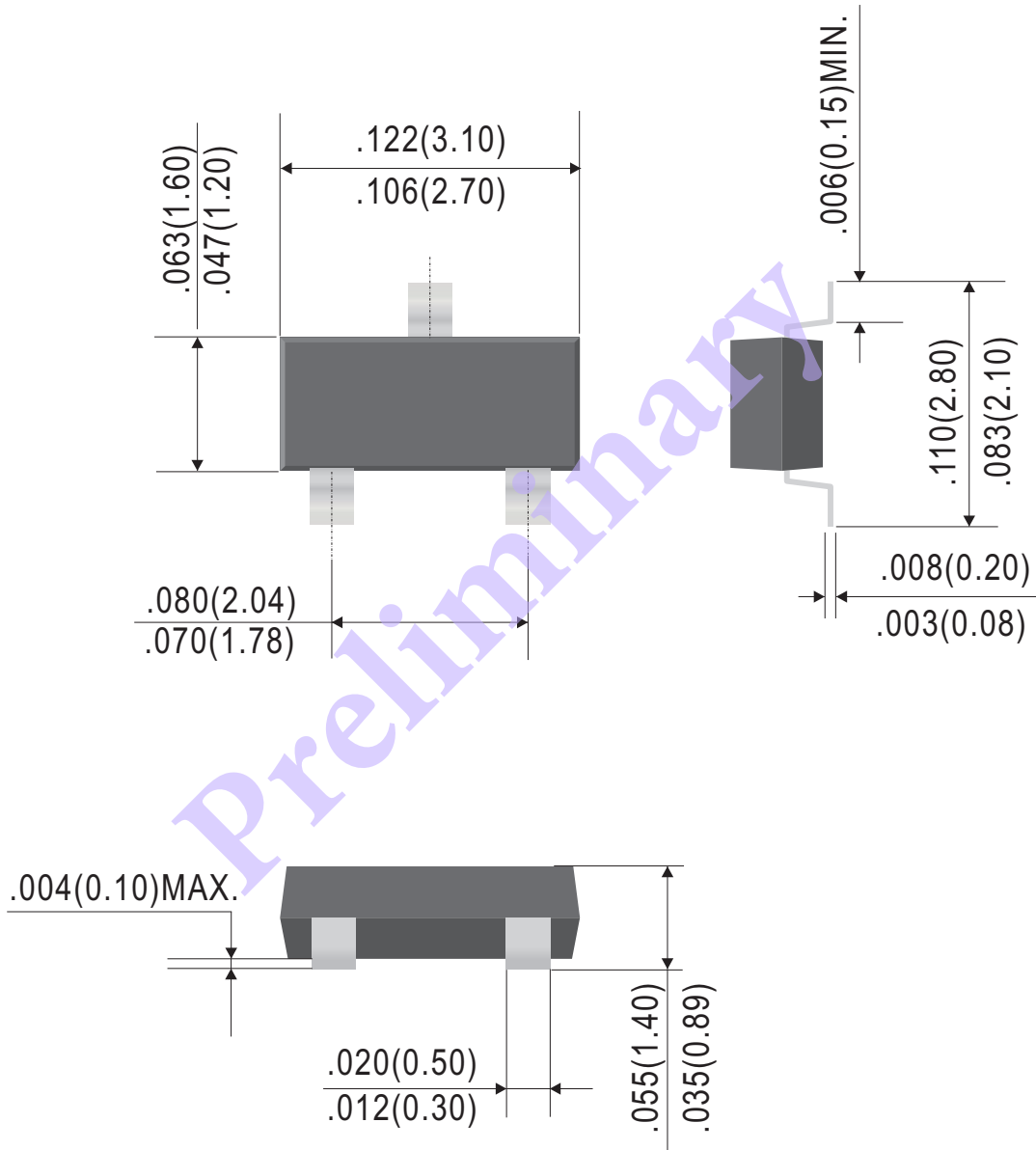
# WILLAS



8050HxLT1

## General Purpose Transistors

### SOT-23



Dimensions in inches and (millimeters)



# WILLAS



8050HxLT1

## General Purpose Transistors

### Ordering Information:

Device PN	Packing
8050H x <sup>(2)</sup> LT1 G <sup>(1)</sup> -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(2) CLASSIFICATION OF hFE RANK

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