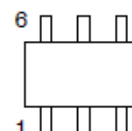


UN5112DW Dual Digital Transistor(PNP)

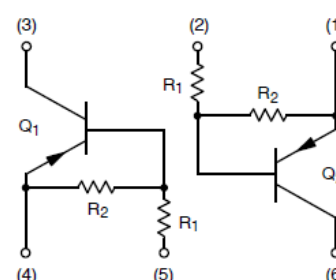
Feature

- Simplifies Circuit Design
- Reduces Board Space
- Reduces Component Count
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

SOT-363



Schematic diagram

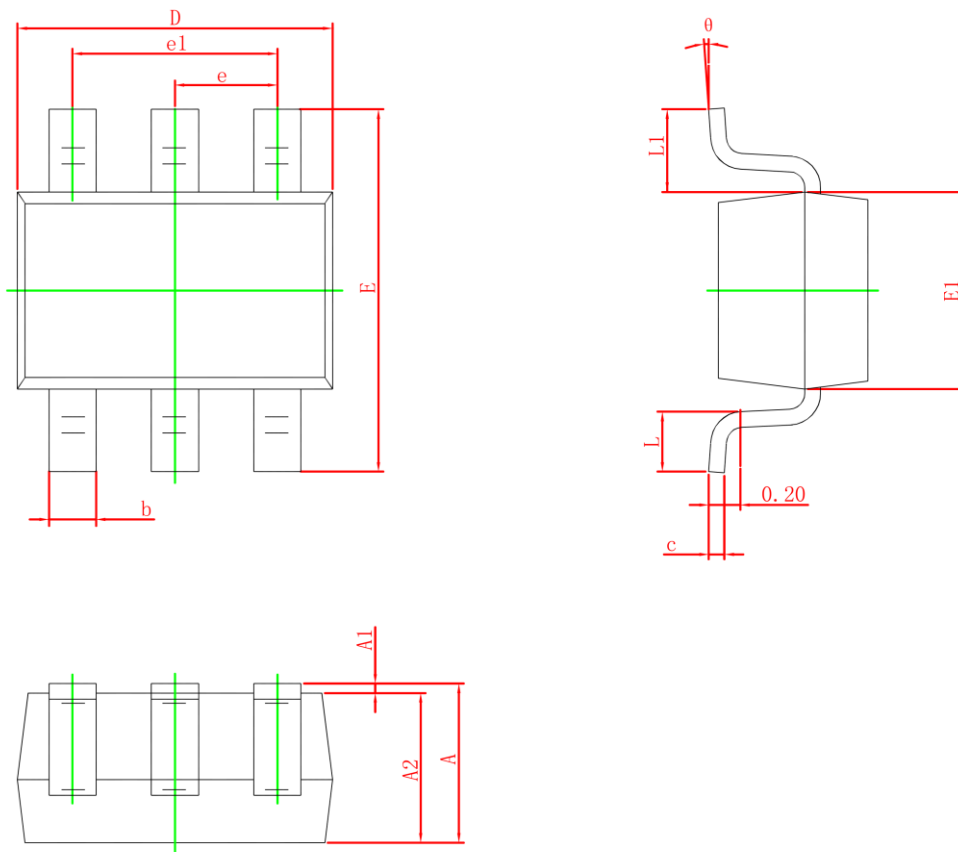


ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40~+10	V
Collector Current – Continuous	I_C	-100	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=-5V, I_O=-100\mu A$	-0.5			V
	$V_{I(on)}$	$V_O=-0.2V, I_O=-5mA$			-3.0	V
Output Voltage	$V_{O(on)}$	$I_C=-10mA, I_B=-0.5mA$			-0.3	V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB}=-50V, I_E=0$			-100	nA
Collector-Emitter Cutoff Current	I_{CEO}	$V_{CE}=-50V, I_B=0$			-500	nA
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB}=-6V, I_C=0$			-0.2	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-50			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-20mA, I_B=0$	-50			V
DC Current Gain	h_{FE}	$I_C=-5mA, V_{CE}=-5V$	56			
Input Resistance	R_1		15.4	22	28.6	k Ω
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	
Transition Frequency	f_T	$V_{CB}=-10V, I_E=-5mA$		250		MHz

SOT-363 Package Information


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.000	0.035	0.039
A1	0	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.080	0.150	0.003	0.006
D	1.800	2.200	0.071	0.087
E	2.000	2.450	0.079	0.096
E1	1.150	1.350	0.045	0.053
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L1	0.525REF		0.021REF	
L	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Attention:

- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.