

RT1P130X SERIES

Transistor

Transistor With Resistor

For Switching Application

Silicon PNP Epitaxial Type

DESCRIPTION

RT1P130X is a one chip transistor with built-in bias resistor, NPN type is RT1N130X.

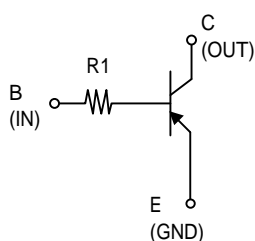
FEATURE

- Built-in bias resistor ($R1=1k$).

APPLICATION

Inverted circuit, switching circuit, interface circuit, driver circuit.

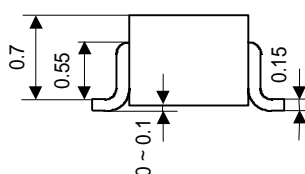
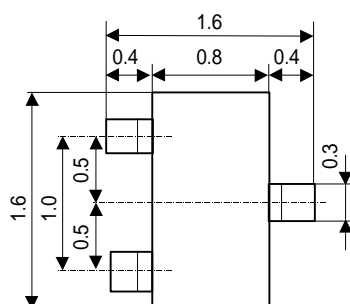
Equivalent circuit



OUTLINE DRAWING

UNIT: mm

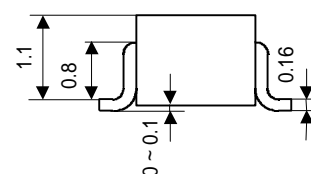
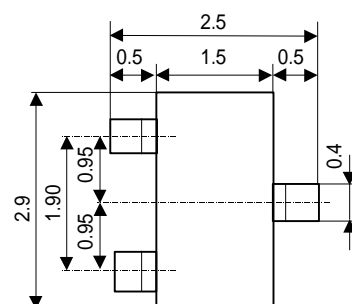
RT1P130U



JEITA: -
JEDEC: -

Terminal Connector
: Base
: Emitter
: Collector

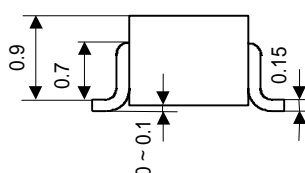
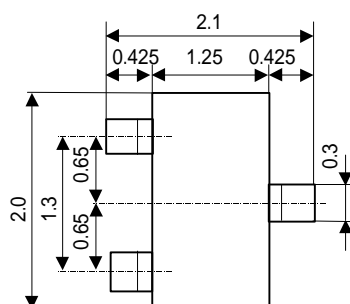
RT1P130C



JEITA: SC-59
JEDEC: Similar to TO-236

Terminal Connector
: Base
: Emitter
: Collector

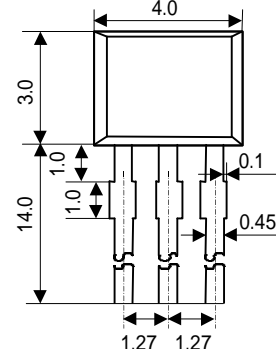
RT1P130M



JEITA: SC-70
JEDEC: -

Terminal Connector
: Base
: Emitter
: Collector

RT1P130S



JEITA: -
JEDEC: -

Terminal Connector
: Emitter
: Collector
: Base

RT1P130X SERIES

Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

MAXIMUM RATING (Ta=25 °C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1P130U	RT1P130M	RT1P130C	RT1P130S	
V _{CBO}	Collector to Base voltage	-50				V
V _{EBO}	Emitter to Base voltage	-6				V
V _{CEO}	Collector to Emitter voltage	-50				V
I _C	Collector current	-100				mA
I _{CM}	Peak Collector current	-200				mA
P _C	Collector dissipation(Ta=25)	150	200		450	mW
T _j	Junction temperature	+150	+150			
T _{stg}	Storage temperature	-55 ~ +150	-55 ~ +150			

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -100 \mu A, R_{BE} =$	-50			V
I_{CBO}	Collector cut off current	$V_{CB} = -50V, I_E = 0$			-0.1	μA
h_{FE}	DC forward current gain	$V_{CE} = -5V, I_C = -1mA$	100			-
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -10mA, I_B = -0.5mA$			-0.3	V
R_1	Input resistance		0.7	1.0	1.3	k
f_T	Gain band width product	$V_{CE} = -6V, I_E = 10mA$		150		MHz



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