

DESCRIPTION

Mitsubishi 2SA1603 is a super mini package resin sealed silicon PNP epitaxial type transistor. It is designed for low frequency voltage amplify application.

Complementary with 2SC4155.

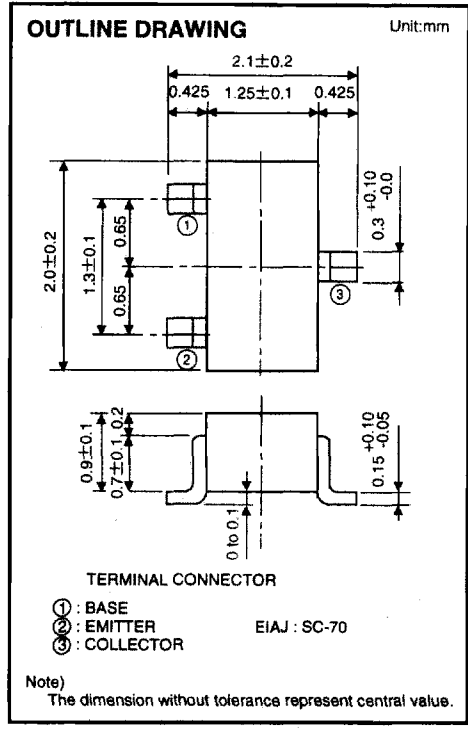
With the equivalent feature of SC-59 package 2SA1530.

FEATURE

- Small collector to emitter saturation voltage
 $V_{CE(sat)} = -0.3V \text{ max } (@ I_C = -30mA, I_E = -1.5mA)$
- Excellent linearity of DC forward current gain
- Super mini package for easy mounting

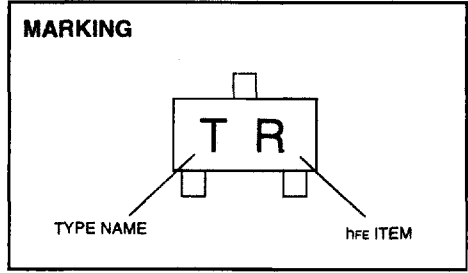
APPLICATION

For hybrid IC, small type machine low frequency voltage amplify application.



MAXIMUM RATINGS ($T_a = 25^\circ C$)

Symbol	Parameter	Ratings	Unit
V_{CB0}	Collector to Base voltage	-50	V
V_{EB0}	Emitter to Base voltage	-6	V
V_{CE0}	Collector to Emitter voltage	-50	V
I_C	Collector current	-100	mA
P_C	Collector dissipation ($T_a = 25^\circ C$)	150	mW
T_j	Junction temperature	+125	$^\circ C$
T_{stg}	Storage temperature	-55 to +125	$^\circ C$



ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -100 \mu A, R_{BE} = \infty$	-50			V
I_{CB0}	Collector cut off current	$V_{CB} = -50V, I_E = 0$			-0.5	μA
I_{EB0}	Emitter cut off current	$V_{EB} = -4V, I_C = 0$			-0.5	μA
$h_{FE} *$	DC forward current gain	$V_{CE} = -6V, I_C = -1mA$	120		820	—
h_{FE}	DC forward current gain	$V_{CE} = -6V, I_C = -0.1mA$	70			—
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -30mA, I_E = -1.5mA$			-0.3	V
f_T	Gain band width product	$V_{CE} = -6V, I_E = 10mA$		200		MHz
C_{ob}	Collector output capacitance	$V_{CB} = -6V, I_E = 0, f = 1MHz$		2.5		pF

* : It shows hFE classification in right table.

Item	Q	R	S	T
hFE	120 to 270	180 to 390	270 to 560	390 to 820
Marking	TQ	TR	TS	TT

TYPICAL CHARACTERISTICS

