〈SMALL-SIGNAL TRANSISITOR〉

RT6N230C

TRANSISTOR WITH RESISTOR
FOR MUTING APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

RT6N230C is a silicon NPN epitaxial type transistor. This product is most suitable for muting circuit , switching circuit because of low on resistance , small collector to emitter saturation voltage.

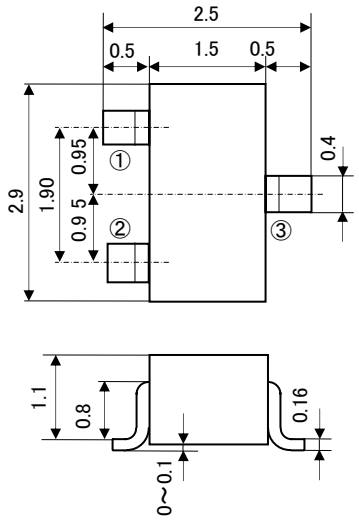
FEATURE

- Small package for easy mounting.
- High reverse hFE
- Small collector to emitter saturation voltage
  VCE(sat)=25mV(TYP.)(@IC=50mA/IB=2.5mA)
- Low on Resistance
  Ron=0.55Ω(TYP.)(@VI=5V)

APPLICATION

muting circuit、switching circuit

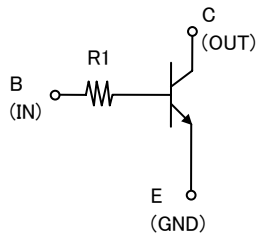
OUTLINE DRAWING Unit : mm



JEITA:SC-59

TERMINAL CONNECTOR
①:BASE
②:EMITTER
③:COLLECTOR

EQUIVALENT CIRCUIT



MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	40	V
V_{EBO}	Emitter to Base voltage	40	V
V_{CEO}	Collector to Emitter voltage	20	V
I_C	Collector current	600	mA
P_C	Peak Collector current	200	mW
Tj	Collector dissipation(Total Ta=25℃)	+150	℃
Tstg	Junction temperature	−55～+150	℃

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ELECTRICAL CHARACTERISTICS（Ta=25℃）

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to B break down voltage	V(BR)CBO	I_C=50μA,I_E=0mA	40	−	−	V
E to B break down voltage	V(BR)EBO	I_C=50μA,I_C=0mA	40			V
C to E break down voltage	V(BR)CEO	I_C=1mA,R_{BE}=∞	20			V
Collector cut off current	ICBO	V_{CB}=40V, I_E=0mA	−	−	0.5	μA
Emitter cut off current	IEBO	V_{EB}=40V, I_C=0mA	−	−	0.5	μA
DC forward current gain	hFE	V_{CE}=5V ,I_C=50mA	820	−	2500	−
C to E saturation voltage	VCE(sat)	I_C=50mA ,I_B=2.5mA	−	25	150	mV
Input resistor	R1	—	1.54	2.2	2.86	kΩ
Gain band width product	fT	V_{CE}=10V, I_E=−50mA, f=100MHz	−	110	−	MHz
Output “ON” resistance	Ron	V_I=5V, R_L=1kΩ, f=1MHz	−	0.55	−	Ω

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