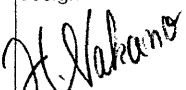


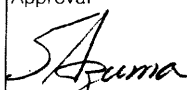
Specification	Products	Type																																																																																																																																							
		RXT2907A																																																																																																																																							
<p>1. SCOPE RXT2907A</p> <p>1.1 Scope. This specification covers the detail requirements for one type PNP silicon epitaxial planar transistor designed for audio frequency small signal amplifier.</p> <p>1.2 Physical dimensions. See figure 1.</p> <p>1.3 Absolute maximum ratings. (Ta=25 °C)</p> <table> <tr> <td>Collector to base voltage</td> <td>V_{CBO}</td> <td>-60V</td> </tr> <tr> <td>Collector to emitter voltage</td> <td>V_{CEO}</td> <td>-60V</td> </tr> <tr> <td>Emitter to base voltage</td> <td>V_{EBO}</td> <td>-5V</td> </tr> <tr> <td>Collector current</td> <td>I_C</td> <td>-600mA</td> </tr> <tr> <td>Power dissipation</td> <td>P_C</td> <td>500mW</td> </tr> <tr> <td>Junction temperature</td> <td>T_j</td> <td>150°C</td> </tr> <tr> <td>Storage temperature range</td> <td>T_{stg}</td> <td>-55~150°C</td> </tr> </table> <p>2. Electrical characteristics (Ta=25 °C)</p> <table border="1"> <thead> <tr> <th>PARAMETER</th> <th>TEST CONDITIONS</th> <th>MIN</th> <th>TYP</th> <th>MAX</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>BVCBO</td> <td>I_C=-10μA</td> <td>-60</td> <td>-</td> <td>-</td> <td>V</td> </tr> <tr> <td>BVCEO</td> <td>I_C=-10mA</td> <td>-60</td> <td>-</td> <td>-</td> <td>V</td> </tr> <tr> <td>BVEBO</td> <td>I_E=-10μA</td> <td>-5</td> <td>-</td> <td>-</td> <td>V</td> </tr> <tr> <td>ICBO</td> <td>V_{CB}=-50V</td> <td>-</td> <td>-</td> <td>-100</td> <td>nA</td> </tr> <tr> <td>ICES</td> <td>V_{CE}=-30V</td> <td>-</td> <td>-</td> <td>-100</td> <td>nA</td> </tr> <tr> <td>I_{EBO}</td> <td>V_{EB}=-3V</td> <td>-</td> <td>-</td> <td>-100</td> <td>nA</td> </tr> <tr> <td>V_{CE}(sat) 1</td> <td>I_C=-150mA, I_B=-15mA</td> <td>-</td> <td>-</td> <td>-0.4</td> <td>V</td> </tr> <tr> <td>V_{CE}(sat) 2</td> <td>I_C=-500mA, I_B=-50mA</td> <td>-</td> <td>-</td> <td>-1.6</td> <td>V</td> </tr> <tr> <td>V_{BE}(sat) 1</td> <td>I_C=-150mA, I_B=-15mA</td> <td>-</td> <td>-</td> <td>-1.3</td> <td>V</td> </tr> <tr> <td>V_{BE}(sat) 2</td> <td>I_C=-500mA, I_B=-50mA</td> <td>-</td> <td>-</td> <td>-2.6</td> <td>V</td> </tr> <tr> <td>h_{FE} 1</td> <td>V_{CE}=-10V, I_C=-0.1mA</td> <td>75</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>h_{FE} 2</td> <td>V_{CE}=-10V, I_C=-1mA</td> <td>100</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>h_{FE} 3</td> <td>V_{CE}=-10V, I_C=-10mA</td> <td>100</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>h_{FE} 4</td> <td>V_{CE}=-10V, I_C=-150mA</td> <td>100</td> <td>-</td> <td>300</td> <td></td> </tr> <tr> <td>h_{FE} 5</td> <td>V_{CE}=-10V, I_C=-500mA</td> <td>50</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>f_T</td> <td>V_{CE}=-20V, I_C=-50mA, f=100MHz</td> <td>200</td> <td>-</td> <td>-</td> <td>MHz</td> </tr> <tr> <td>C_{ob}</td> <td>V_{CB}=-10V, f=100KHz</td> <td>-</td> <td>-</td> <td>8</td> <td>pF</td> </tr> <tr> <td>C_{ib}</td> <td>V_{EB}=-2V, f=100KHz</td> <td>-</td> <td>-</td> <td>30</td> <td>pF</td> </tr> </tbody> </table>			Collector to base voltage	V _{CBO}	-60V	Collector to emitter voltage	V _{CEO}	-60V	Emitter to base voltage	V _{EBO}	-5V	Collector current	I _C	-600mA	Power dissipation	P _C	500mW	Junction temperature	T _j	150°C	Storage temperature range	T _{stg}	-55~150°C	PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT	BVCBO	I _C =-10μA	-60	-	-	V	BVCEO	I _C =-10mA	-60	-	-	V	BVEBO	I _E =-10μA	-5	-	-	V	ICBO	V _{CB} =-50V	-	-	-100	nA	ICES	V _{CE} =-30V	-	-	-100	nA	I _{EBO}	V _{EB} =-3V	-	-	-100	nA	V _{CE} (sat) 1	I _C =-150mA, I _B =-15mA	-	-	-0.4	V	V _{CE} (sat) 2	I _C =-500mA, I _B =-50mA	-	-	-1.6	V	V _{BE} (sat) 1	I _C =-150mA, I _B =-15mA	-	-	-1.3	V	V _{BE} (sat) 2	I _C =-500mA, I _B =-50mA	-	-	-2.6	V	h _{FE} 1	V _{CE} =-10V, I _C =-0.1mA	75	-	-		h _{FE} 2	V _{CE} =-10V, I _C =-1mA	100	-	-		h _{FE} 3	V _{CE} =-10V, I _C =-10mA	100	-	-		h _{FE} 4	V _{CE} =-10V, I _C =-150mA	100	-	300		h _{FE} 5	V _{CE} =-10V, I _C =-500mA	50	-	-		f _T	V _{CE} =-20V, I _C =-50mA, f=100MHz	200	-	-	MHz	C _{ob}	V _{CB} =-10V, f=100KHz	-	-	8	pF	C _{ib}	V _{EB} =-2V, f=100KHz	-	-	30	pF
Collector to base voltage	V _{CBO}	-60V																																																																																																																																							
Collector to emitter voltage	V _{CEO}	-60V																																																																																																																																							
Emitter to base voltage	V _{EBO}	-5V																																																																																																																																							
Collector current	I _C	-600mA																																																																																																																																							
Power dissipation	P _C	500mW																																																																																																																																							
Junction temperature	T _j	150°C																																																																																																																																							
Storage temperature range	T _{stg}	-55~150°C																																																																																																																																							
PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT																																																																																																																																				
BVCBO	I _C =-10μA	-60	-	-	V																																																																																																																																				
BVCEO	I _C =-10mA	-60	-	-	V																																																																																																																																				
BVEBO	I _E =-10μA	-5	-	-	V																																																																																																																																				
ICBO	V _{CB} =-50V	-	-	-100	nA																																																																																																																																				
ICES	V _{CE} =-30V	-	-	-100	nA																																																																																																																																				
I _{EBO}	V _{EB} =-3V	-	-	-100	nA																																																																																																																																				
V _{CE} (sat) 1	I _C =-150mA, I _B =-15mA	-	-	-0.4	V																																																																																																																																				
V _{CE} (sat) 2	I _C =-500mA, I _B =-50mA	-	-	-1.6	V																																																																																																																																				
V _{BE} (sat) 1	I _C =-150mA, I _B =-15mA	-	-	-1.3	V																																																																																																																																				
V _{BE} (sat) 2	I _C =-500mA, I _B =-50mA	-	-	-2.6	V																																																																																																																																				
h _{FE} 1	V _{CE} =-10V, I _C =-0.1mA	75	-	-																																																																																																																																					
h _{FE} 2	V _{CE} =-10V, I _C =-1mA	100	-	-																																																																																																																																					
h _{FE} 3	V _{CE} =-10V, I _C =-10mA	100	-	-																																																																																																																																					
h _{FE} 4	V _{CE} =-10V, I _C =-150mA	100	-	300																																																																																																																																					
h _{FE} 5	V _{CE} =-10V, I _C =-500mA	50	-	-																																																																																																																																					
f _T	V _{CE} =-20V, I _C =-50mA, f=100MHz	200	-	-	MHz																																																																																																																																				
C _{ob}	V _{CB} =-10V, f=100KHz	-	-	8	pF																																																																																																																																				
C _{ib}	V _{EB} =-2V, f=100KHz	-	-	30	pF																																																																																																																																				

ROHM CO., LTD.

Design



Approval



Specification No.

TLRXT2907A-1

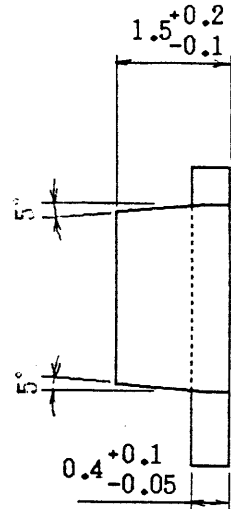
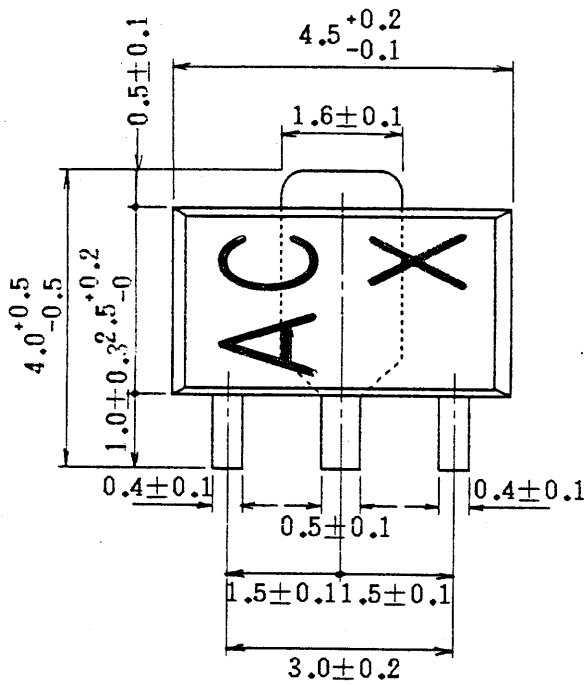
Date

9/24/86

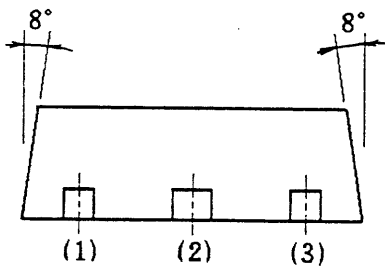
Specification	Products	Type
		RXT2907A

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
t _{on}		—	—	50	nS
t _d	V _{CC} =-30V, V _{BE(OFF)} =-1.5V	—	—	10	nS
t _r	I _C =-150mA, I _{B1} =-15mA	—	—	40	nS
t _{off}		—	—	100	nS
t _s	V _{CC} =-30V, I _C =-150mA	—	—	80	nS
t _f	I _{B1} = I _{B2} =-15mA	—	—	30	nS

Specification	Products	Type RXT2907A
---------------	----------	------------------



UNIT: mm



- (1) Base
- (2) Collector
- (3) Emitter

