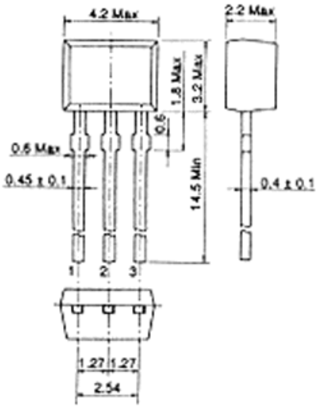
HITACHI

2SC3553

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER



(SPAK)

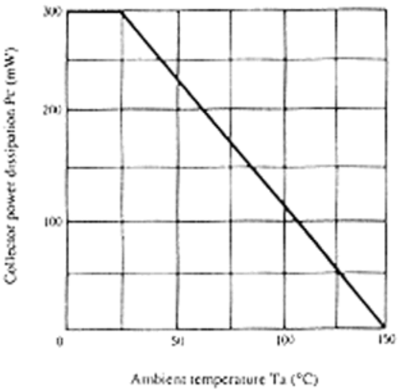
1. Emitter
2. Collector
3. Base

(Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC3553	Unit
Collector to base voltage	V_{CBO}	35	V
Collector to emitter voltage	V_{CEO}	35	V
Emitter to base voltage	V_{EBO}	4	V
Collector current	I_C	500	mA
Collector power dissipation	P_C	300	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A$, $I_E = 0$	35	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA$, $R_{BE} = \infty$	35	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A$, $I_C = 0$	4	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = 20V$, $I_E = 0$	—	—	0.5	μA
DC current transfer ratio	h_{FE1}*	$V_{CE} = 3V$, $I_C = 10mA$	60	—	320	
	h_{FE2}	$V_{CE} = 3V$, $I_C = 500mA$**	10	—	—	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 150mA$, $I_B = 15mA$**	—	0.2	0.6	V
Base to emitter voltage	V_{BE}	$V_{CE} = 3V$, $I_C = 10mA$	—	0.64	—	V

* The 2SC3553 is grouped by h_{FE1} as follows.

** Pulse Test

B	C	D
60 to 120	100 to 200	160 to 320

■ **See characteristic curves of 2SC1213.**