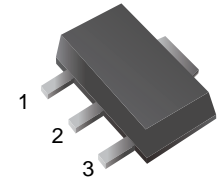


Transistor (NPN)

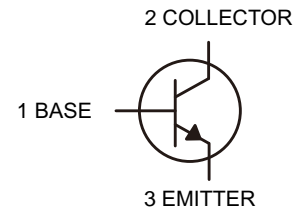
Features

- Low Saturation Voltage
- Excellent h_{FE} characteristics
- Lead free in comply with EU RoHS 2011/65/EU directives



Ordering Information

Part Number	Marking	Shipping	Reel
LT2C4672-TR1	4672-R	1000PCS Tape&Reel	7 inches
LT2C4672-TR3	4672-R	3000PCS Tape&Reel	13 inches



Maximum Ratings ($T_a=25$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	2	A
Collector Power Dissipation	P_D	500	mW
Maximum Junction-to-Ambient	$R_{\theta JA}$	250	$^{\circ}C/W$
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}C$

Electrical characteristics ($T_a=25$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit
DC Current Gain at $V_{CE} = 2 V$, $I_C = 500 mA$ Current Gain Group	H_{FE}	180		390	
Collector Base Cutoff Current at $V_{CB} = 60 V$	I_{CBO}			0.1	μA
Emitter Base Cutoff Current at $V_{EB} = 5 V$	I_{EBO}			0.1	μA
Collector Base Breakdown Voltage at $I_C = 50 \mu A$	$V_{(BR)CBO}$	60			V
Collector Emitter Breakdown Voltage at $I_C = 1 mA$	$V_{(BR)CEO}$	50			V
Emitter Base Breakdown Voltage at $I_E = 50 \mu A$	$V_{(BR)EBO}$	6			V
Collector Emitter Saturation Voltage at $I_C = 1 A$, $I_B = 50 mA$	$V_{CE(sat)}$			0.35	V
Transition Frequency at $V_{CE} = 2 V$, $I_C = 0.5 A$, $f=100MHz$	f_T		210		MHz
Collector Output Capacitance at $V_{CB} = 10 V$, $I_E = 0$, $f = 1MHz$	C_{ob}		25		pF

Characteristics Curves

Fig.1 Static Characteristic

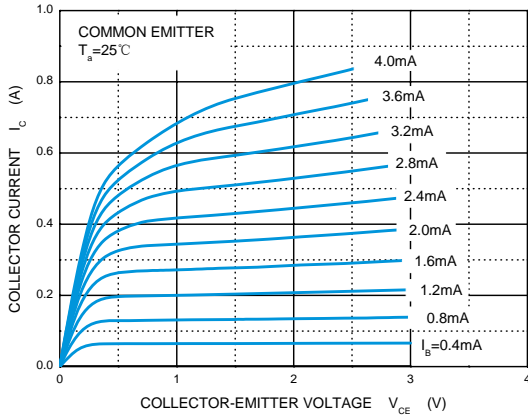


Fig.2 h_{FE} vs I_c

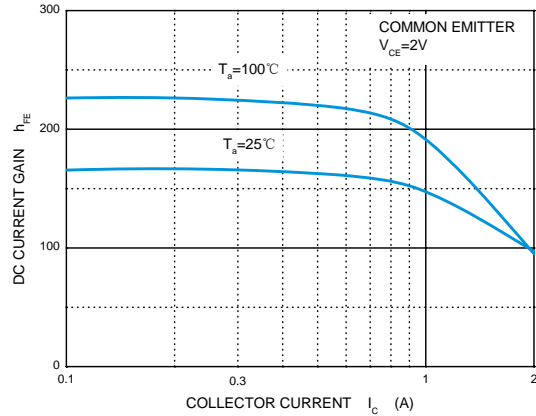


Fig.3 V_{CEsat} vs I_c

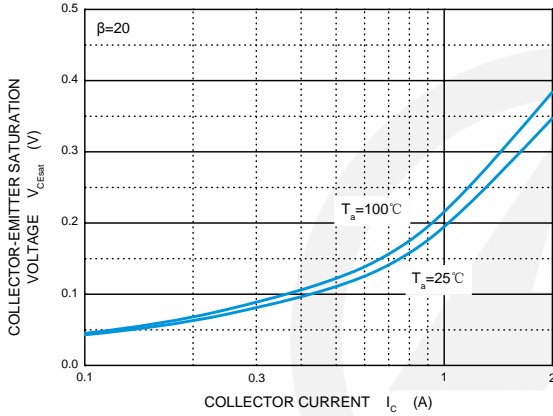


Fig.4 V_{BEsat} vs I_c

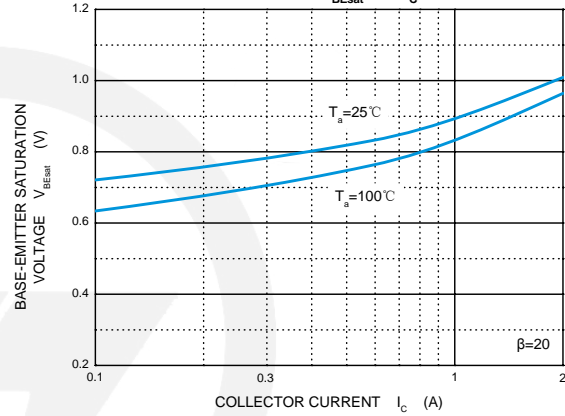


Fig.5 I_c vs V_{BE}

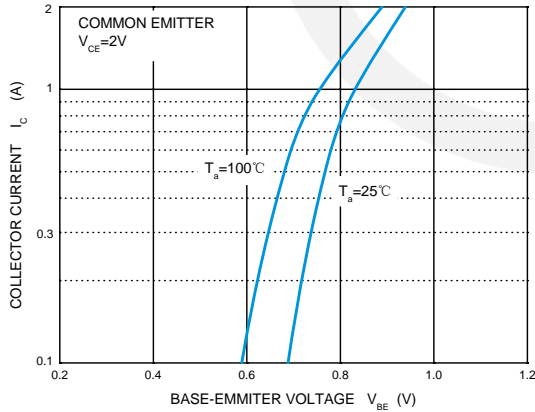


Fig.6 C_{ob}/C_{ib} vs V_{CB}/V_{EB}

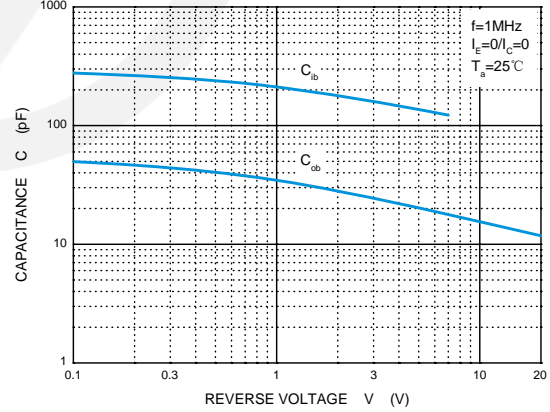
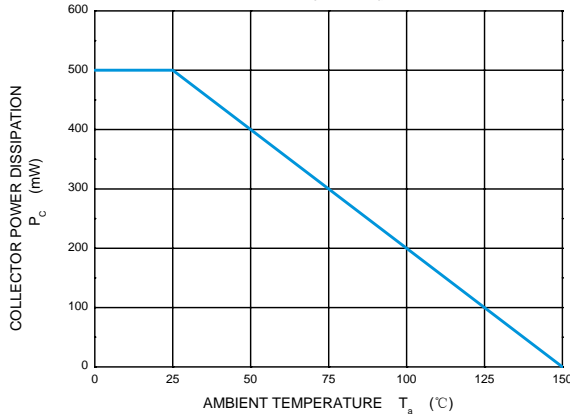
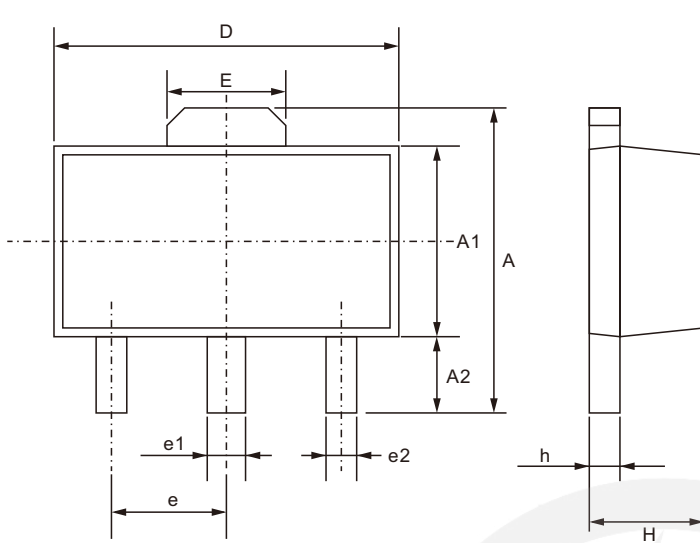


Fig.7 P_c vs T_a



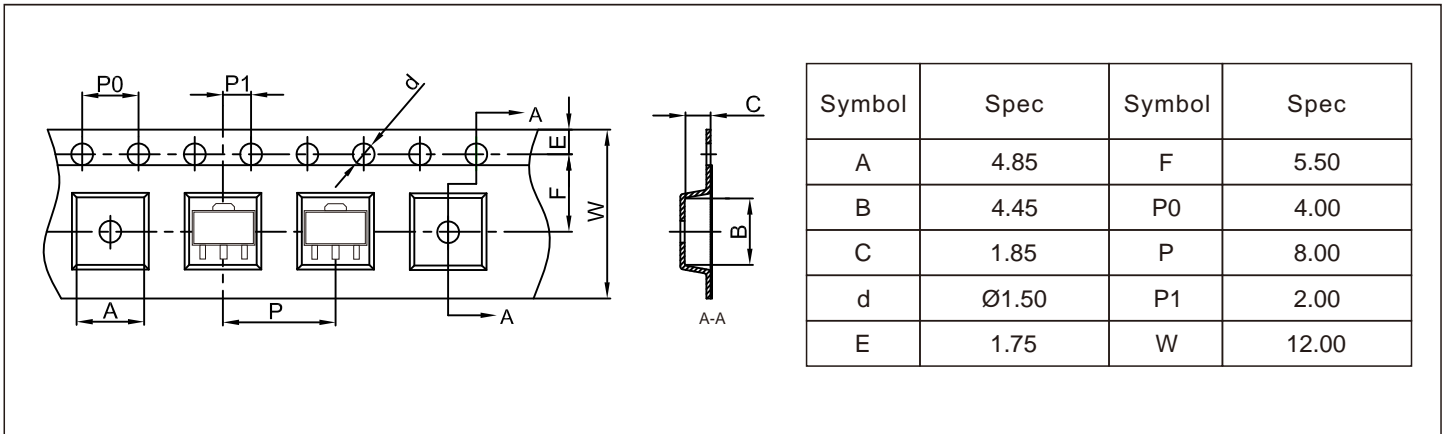
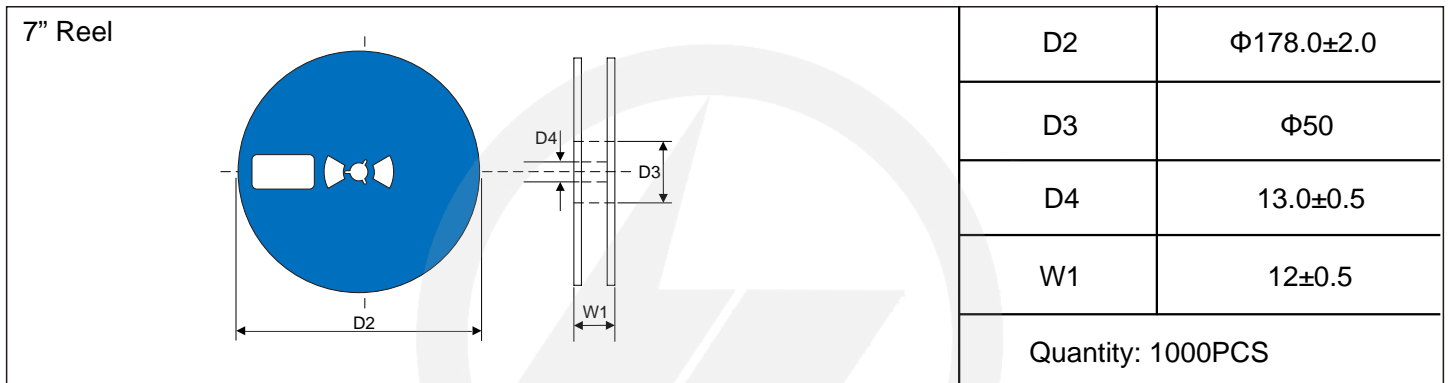
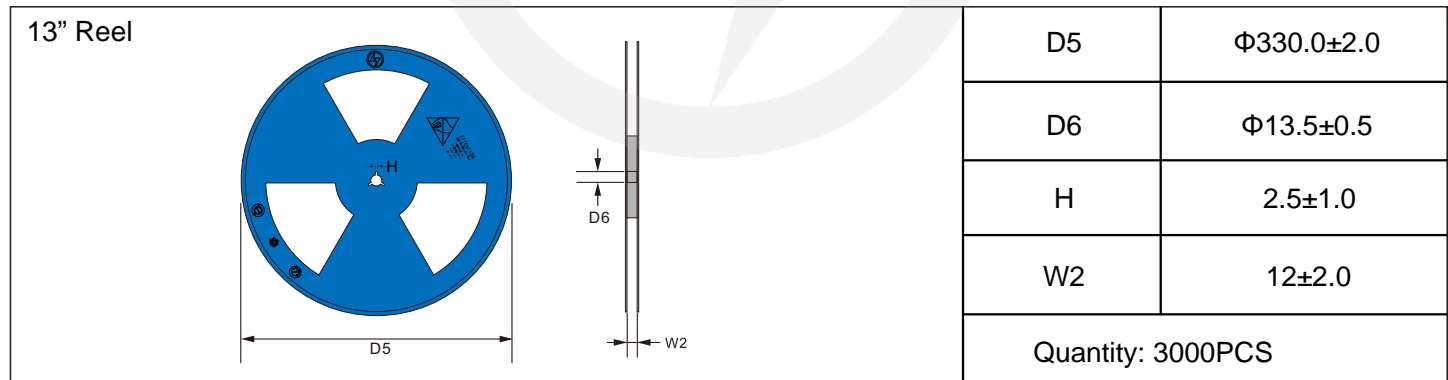
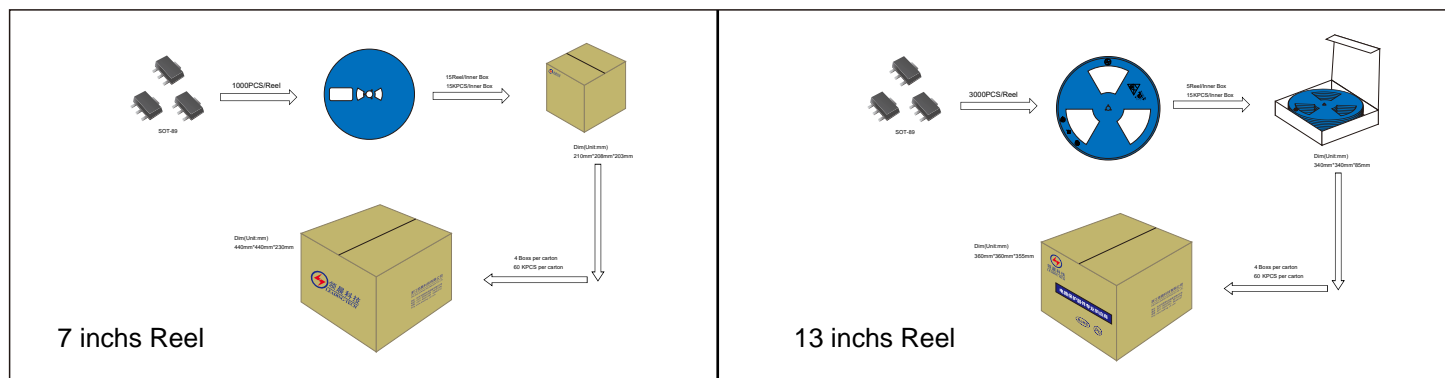


SOT-89 Package Outline



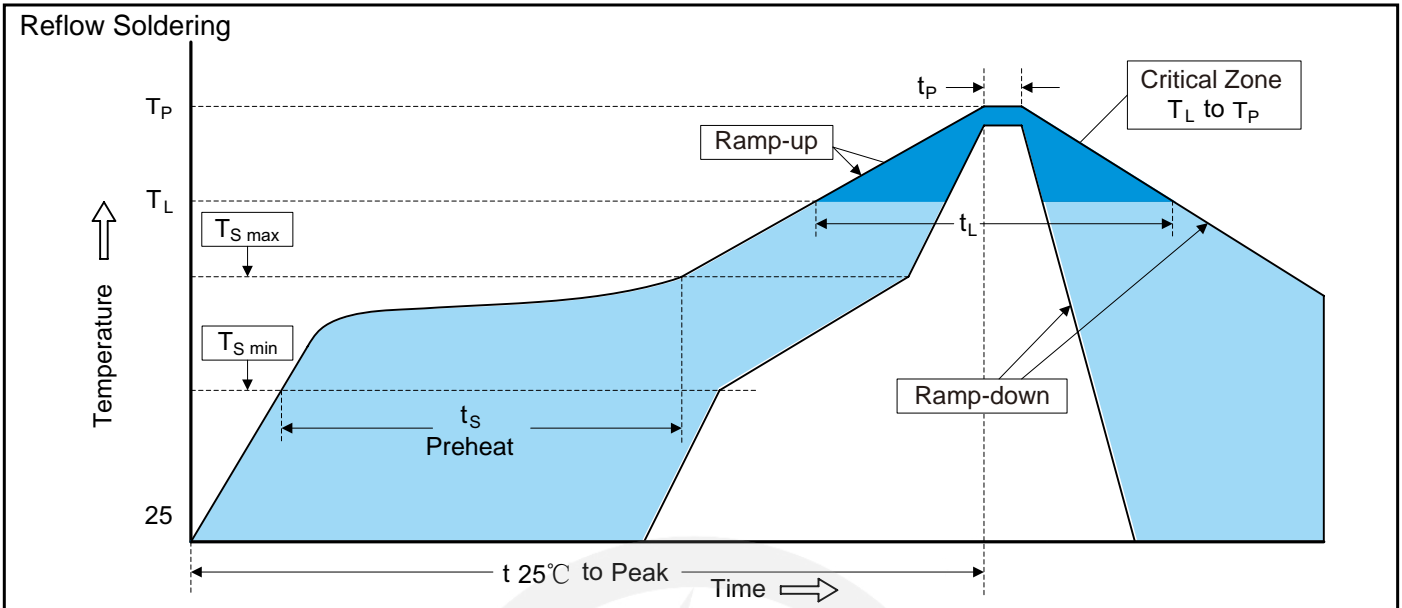
Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	3.750	4.250
A1	2.400	2.600
A2	0.950	1.050
D	4.400	4.600
E	1.500	1.600
e1	0.470	0.530
e2	0.350	0.450
e	1.500 TYP.	
H	1.400	1.600
h	0.300	0.500

Carrier Tape Dimensions
Unit : mm

Reel Dimensions
Unit : mm

Reel Dimensions
Unit : mm

Packaging




Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat	
-Temperature Min (T _{S min})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.9.13	2024.9.13	3.0	New File	/	Ding	
02	2025.06.12	2025.06.12	3.1	Update packaging information	/	Ding	