TIP147T

Rev. H Oct.-2018

DATA SHEET

/ Descriptions

WR0553 ṂṂ Ŀ SQS ᴁṀ ɥ s Ⅱ ᄀ Silicon PNP transistor in a TO-220 Plastic Package.

/ Features

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Monolithic construction with built in base-emitter shunt resistors, High DC current gain complement to TIP142T.

/ Applications

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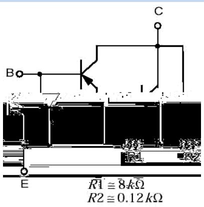
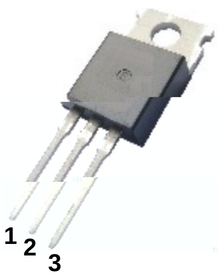
Linear and switching industrial equipment.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

/ h_{FE} Classifications & Marking

ɗ м ᄉ ٻ ̋ See Marking Instructions.

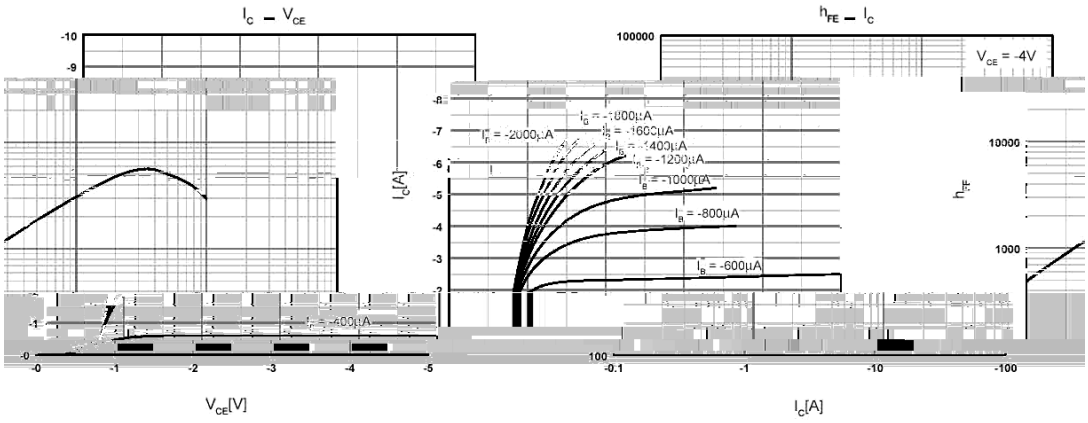
/ Absolute Maximum Ratings(Ta=25)

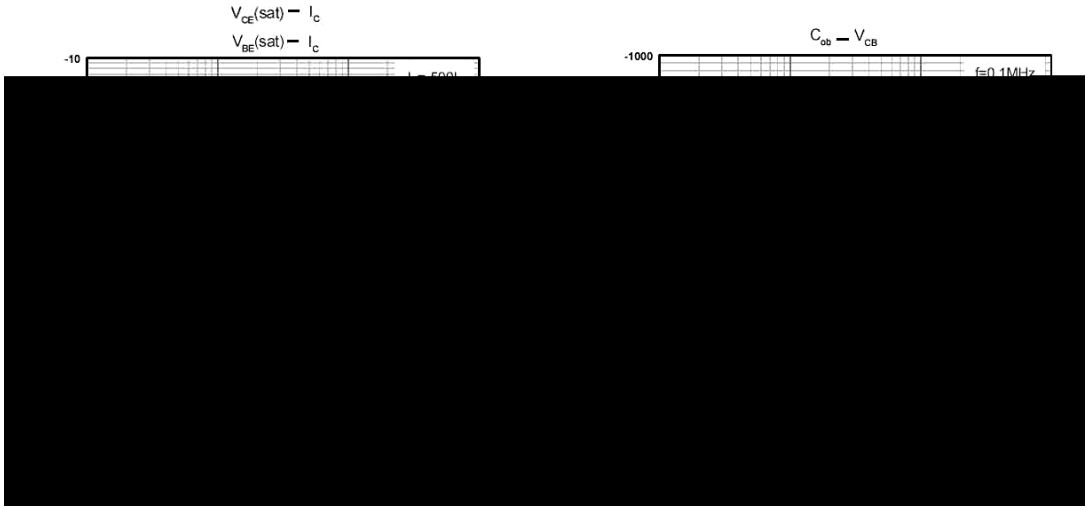
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	-100	V
Collector to Emitter Voltage	V_{CEO}	-100	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-10	A
Peak Collector Current	I_{CP}	-15	A
Base Current - Continuous	I_B	-0.5	A
Collector Power Dissipation	P_C(T_C=25)	80	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

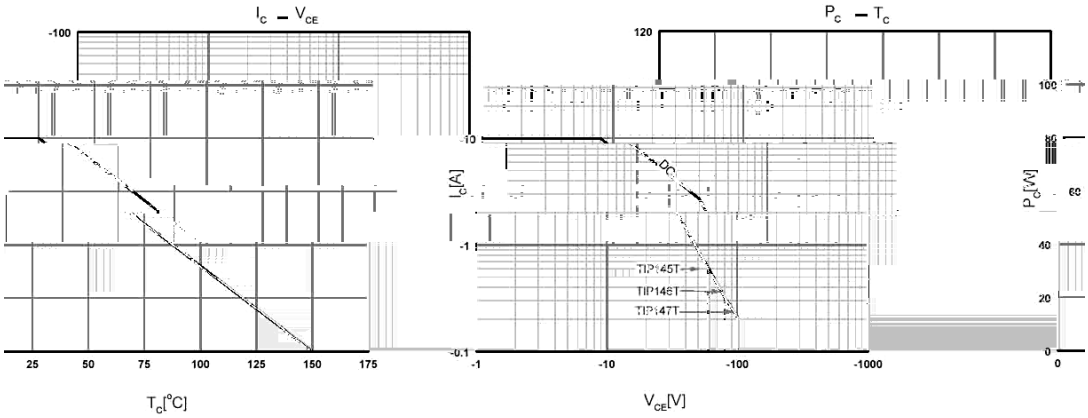
/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	Ш :ϯ ϒ Test Conditions	ω ṇ Ö Min	Ɛ ʒ Ö Typ	ω ² Ö Max	D Ч Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-30mA I_B=0	-100			V
Collector Cut-Off Current	I_{CEO}	V_{CE}=-50V I_B=0			-2.0	mA
Collector Cut-Off Current	I_{CBO}	V_{CB}=-100V I_E=0			-1.0	mA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-5.0V I_C=0			-2.0	mA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-4.0V I_C=-5.0A	1000			
	$h_{FE(2)}$	V_{CE}=-4.0V I_C=-10A	500			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	I_C=-5.0A I_B=-10mA			-2.0	V
	$V_{CE(sat)(2)}$	I_C=-10A I_B=-40mA			-3.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-10A I_B=-40mA			-3.5	V
Base to Emitter Voltage	V_{BE}	V_{CE}=-4.0V I_C=-10A			-3.0	V
Delay Time	t_D	V_{CC}=-3V I_C=-5A I_{B1}=-20mA I_{B2}=20mA R_L=6Ω		0.15		μs
Rise Time	t_R			0.55		μs
Storage Time	t_{STG}			2.5		μs
Fall Time	t_F			2.5		μs

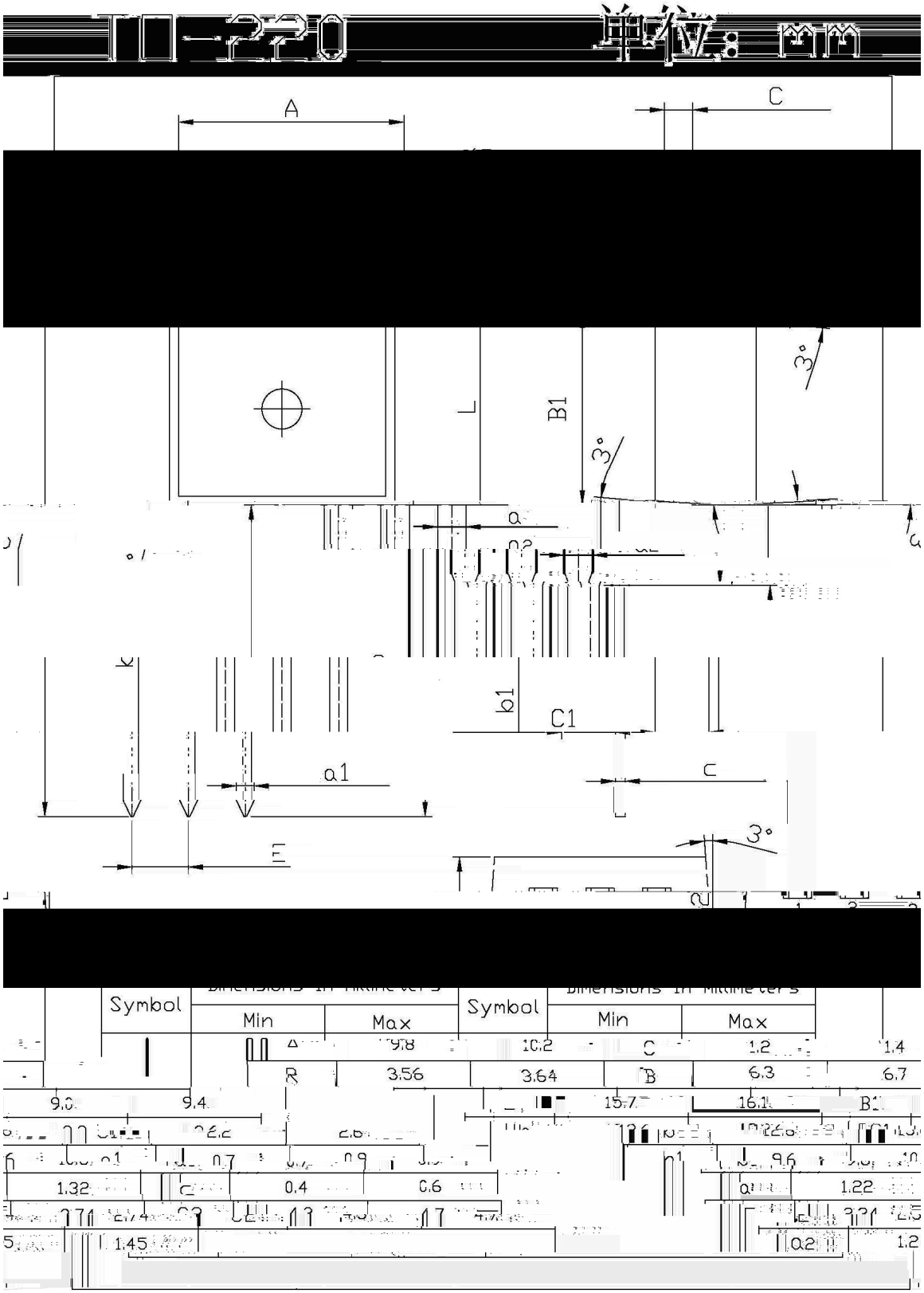
/ Electrical Characteristic Curve



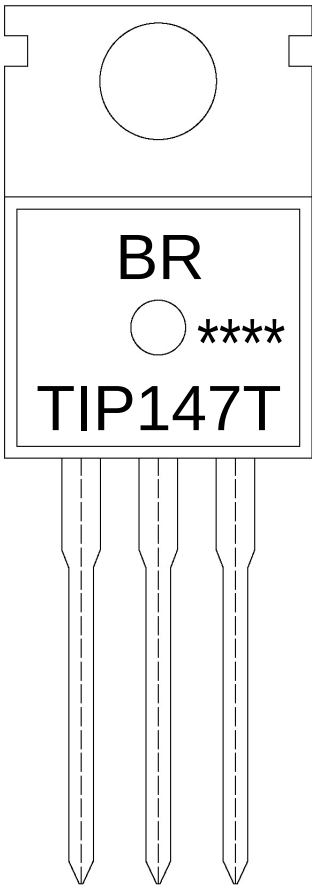




/ Package Dimensions



/ Marking Instructions

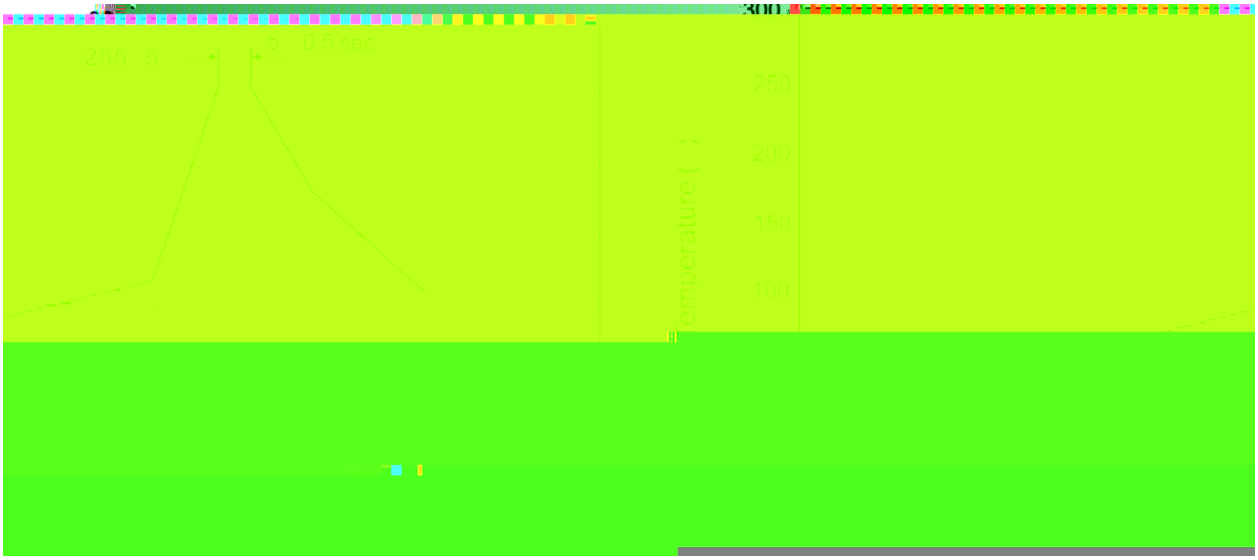


EU	
WLS47:W	

Note:

BR:	Company Code
TIP147T:	Product Type.
****:	Lot No. Code, code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



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1 Ĺ ♬ □ ỷ 25 Ḱ 150 ɬ ı ˋH ژ 60 Ḱ 90sec;

2 Š Ө □ ỷ 255 ° 5 ɬ ı ˋH ژ ˋY ㅀ ㎛ 5 ° 0.5sec;

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Note:

1.Preheating:25~150 ɬ , Time:60~90sec.

2.Peak Temp.:255 ° 5 ɬ , Duration:5 ° 0.5sec.