

/ Descriptions

WR0553 SQS Silicon PNP transistor in a TO-220 Plastic Package.

/ Features

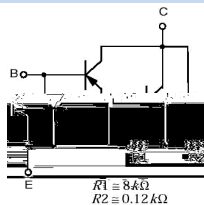
0 WLS475W

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

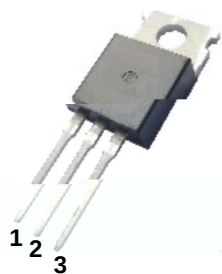
/ Applications

Linear and switching industrial equipment.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

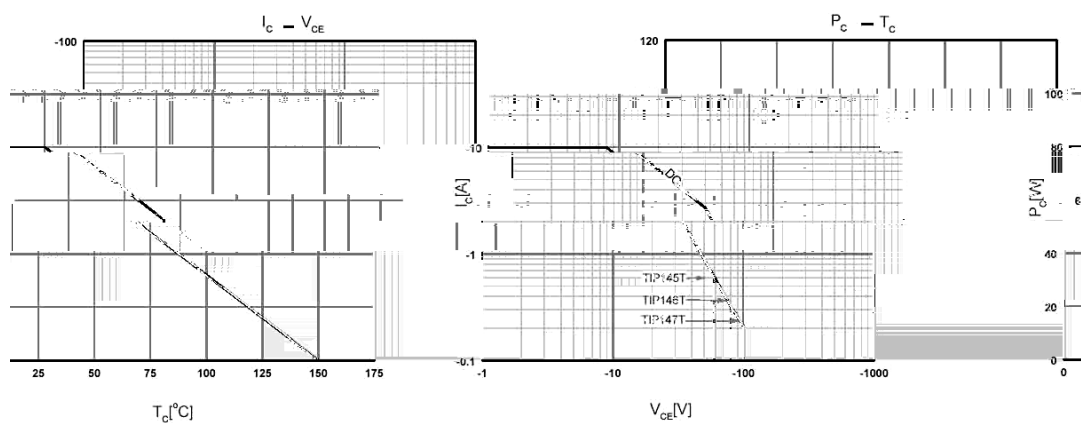
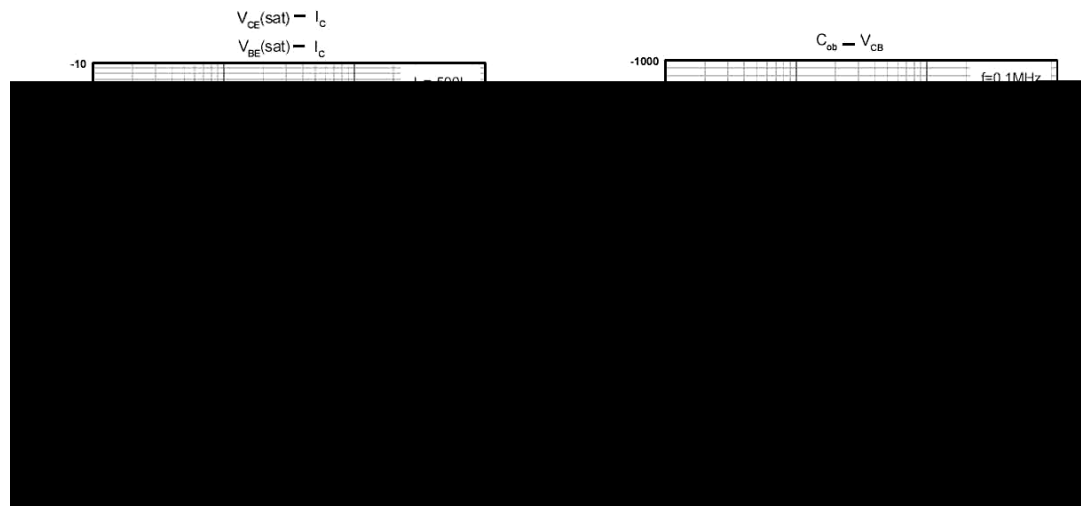
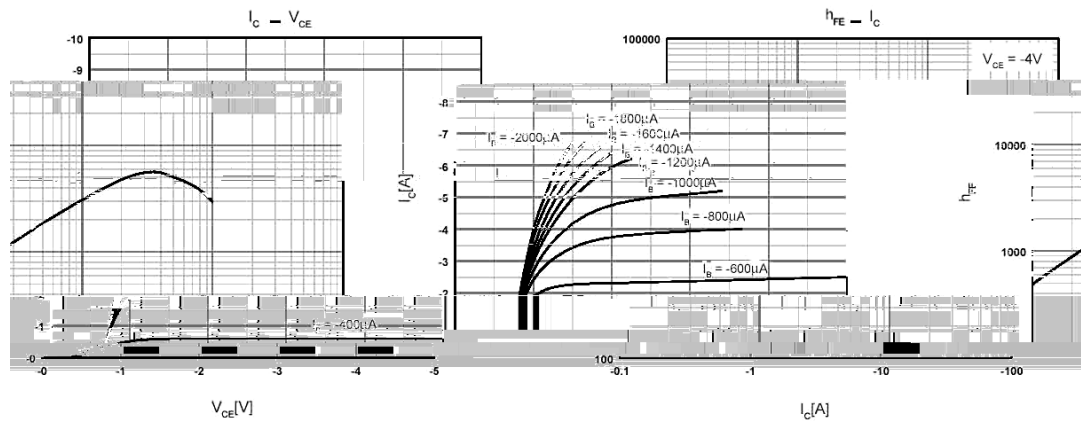
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	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	

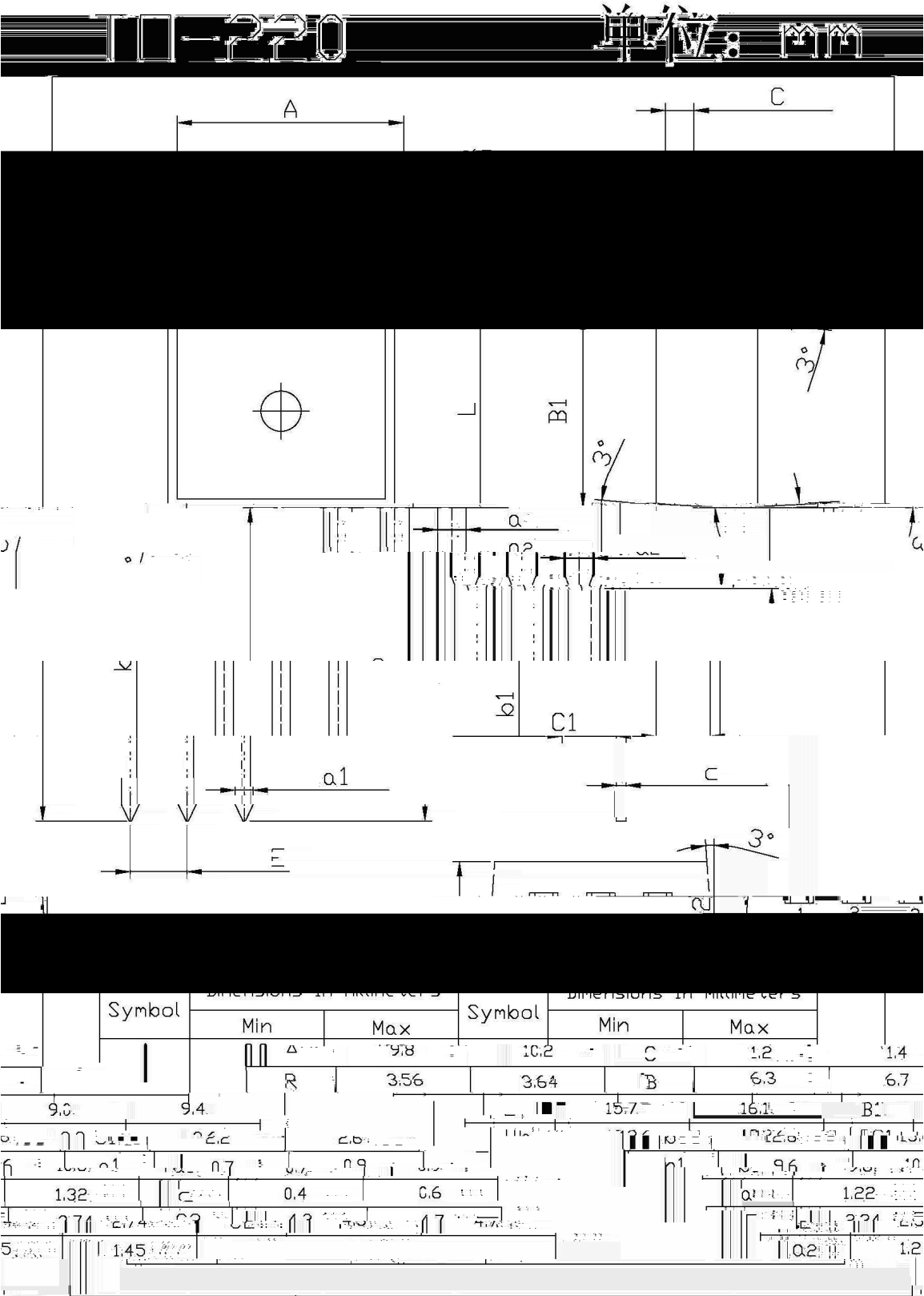
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	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	$V_{CC}=-3V$ $I_C=-5A$ $I_{B1}=-20mA$ $I_{B2}=20mA$ $R_L=6\Omega$		0.15		μs
Rise Time	t_R			0.55		μs
Storage Time	t_{STG}			2.5		μs
Fall Time	t_F			2.5		μs

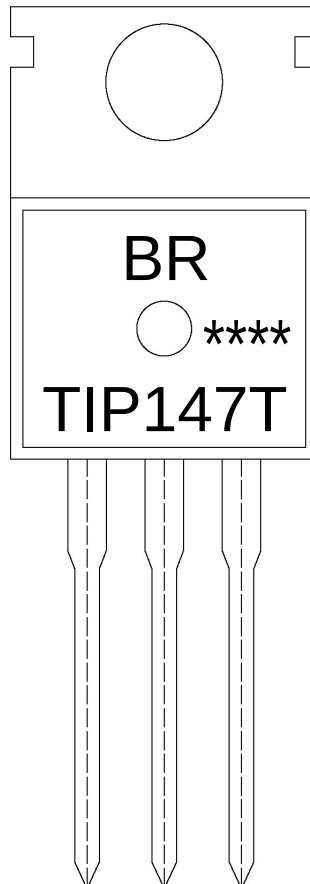
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



EU

WLS47 : W

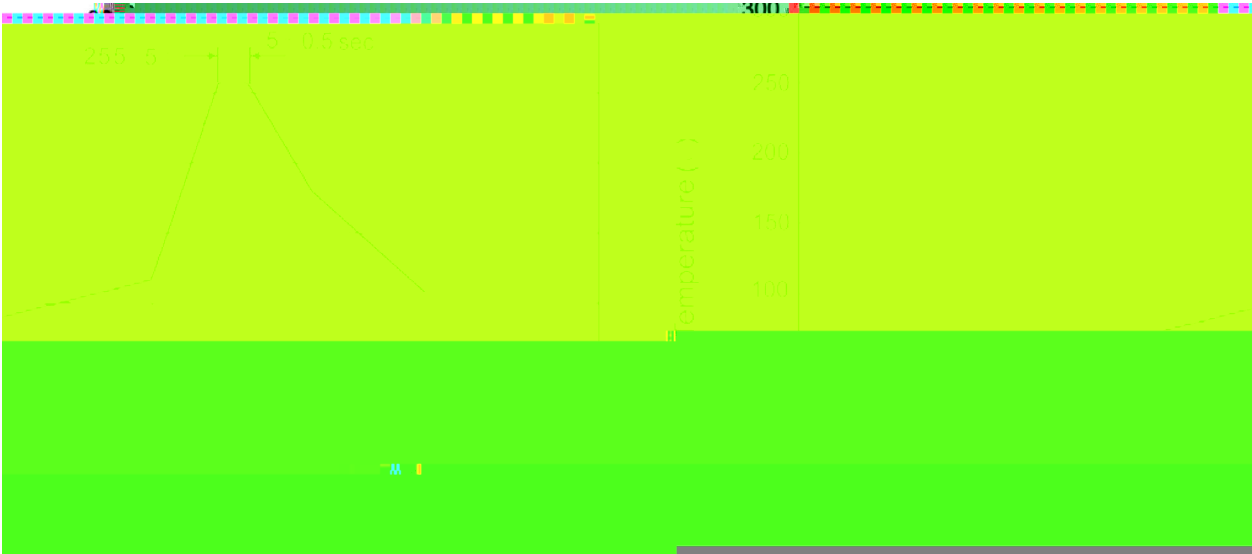
Note:

BR: Company Code

TIP147T: Product Type.

****: Lot No. Code, code change with Lot No.

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



- Note:
1.Preheating:25~150℃, Time:60~90sec.
2.Peak Temp.:255 ± 5℃, Duration:5 ± 0.5sec.
- | | | |
|---|-----------|-------------|
| 1 | 25 ~ 150℃ | 60 ~ 90sec; |
| 2 | 255 ± 5℃ | 5 ± 0.5sec; |
| 3 | 255 ~ 25℃ | 6 ~ 30sec; |