/ Descriptions

TO-92 PNP Silicon PNP transistor in a TO-92 Plastic Package.

/ Features

1W

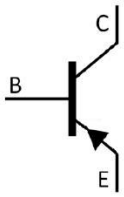
One watt high current transistors.

/ Applications

1W

One watt high current amplifier.

/ Equivalent Circuit



/ Pinning

PIN1 Collector PIN 2 Base PIN 3 Emitter

/ hFE Classifications & Marking

See Marking Instructions.

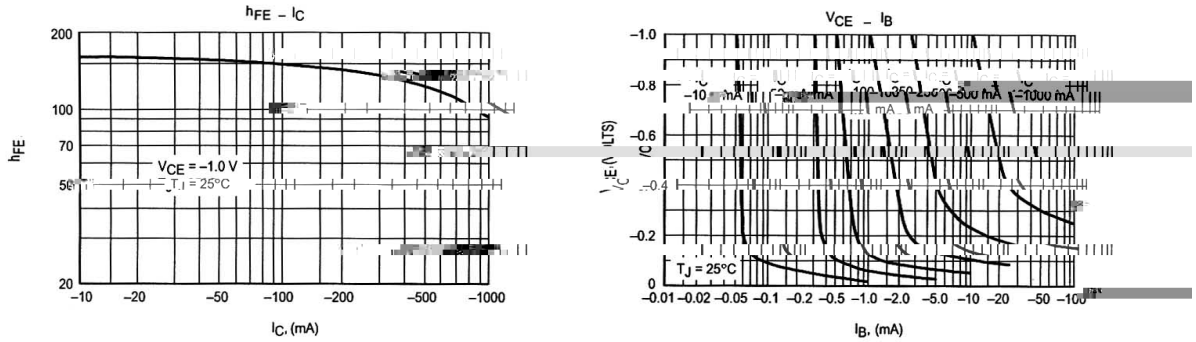
/ Absolute Maximum Ratings(Ta=25)

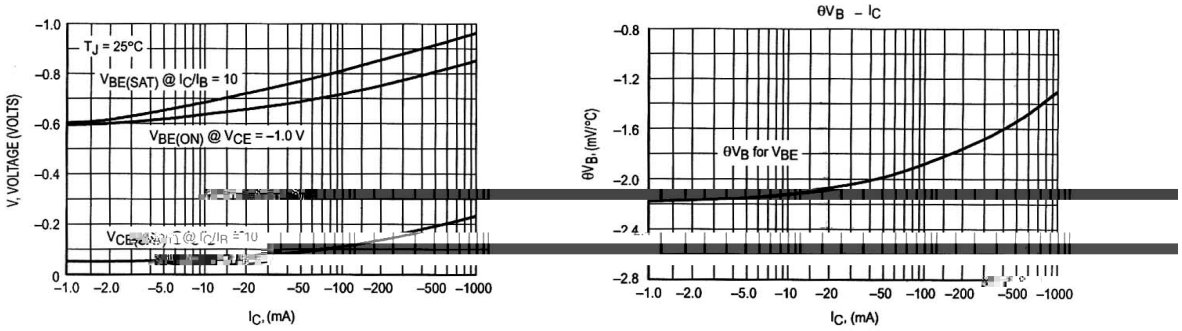
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.0	A
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

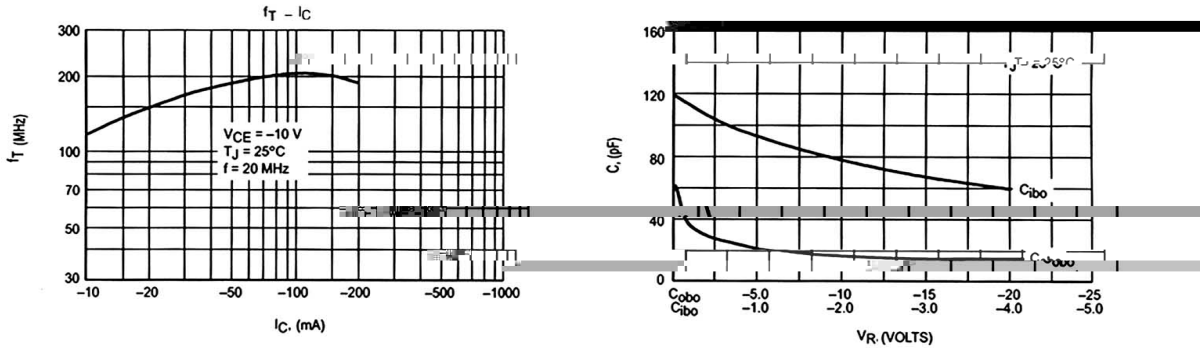
/ Electrical Characteristics(Ta=25)

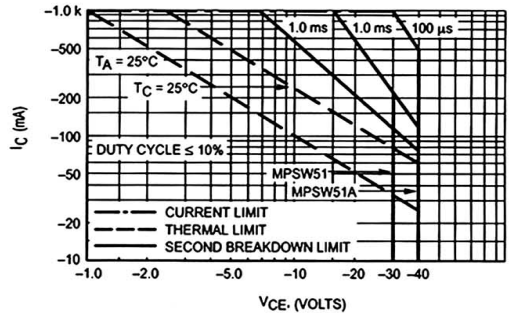
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-0.1mA I_E=0	-40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-30			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-0.1mA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-3.0V I_C=0			-0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-100mA	60		320	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-10mA	55			
	$h_{FE(3)}$	V_{CE}=-1.0V I_C=-1.0A	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-1.0A I_B=-100mA			-0.7	V
Base to Emitter On Voltage	$V_{BE(ON)}$	V_{CE}=-1.0V I_C=-1.0A			-1.2	V
Transition Frequency	f_T	V_{CE}=-10V I_C=-50mA f=20MHz	50			MHz
Output Capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		30		pF

/ Electrical Characteristic Curve

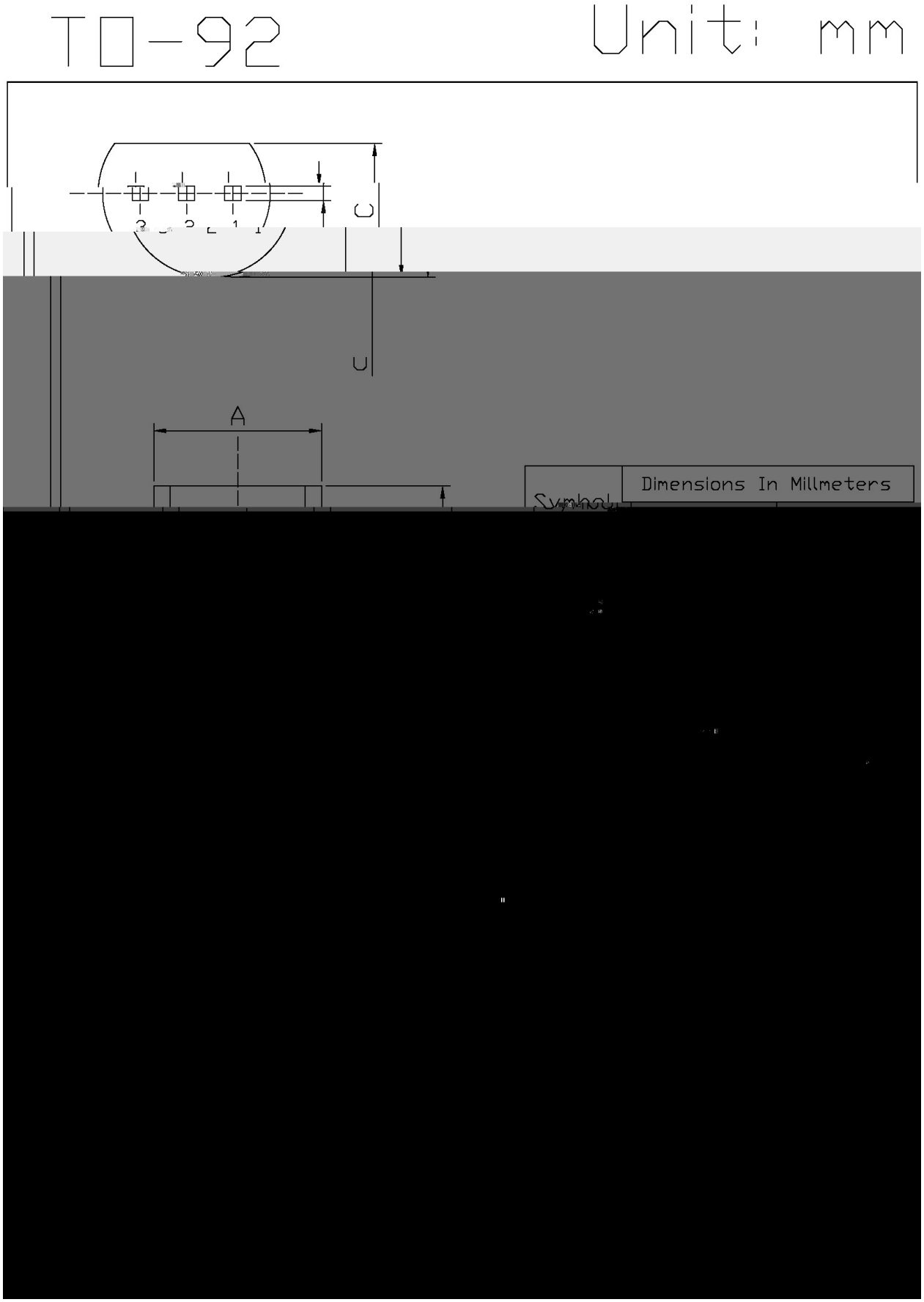




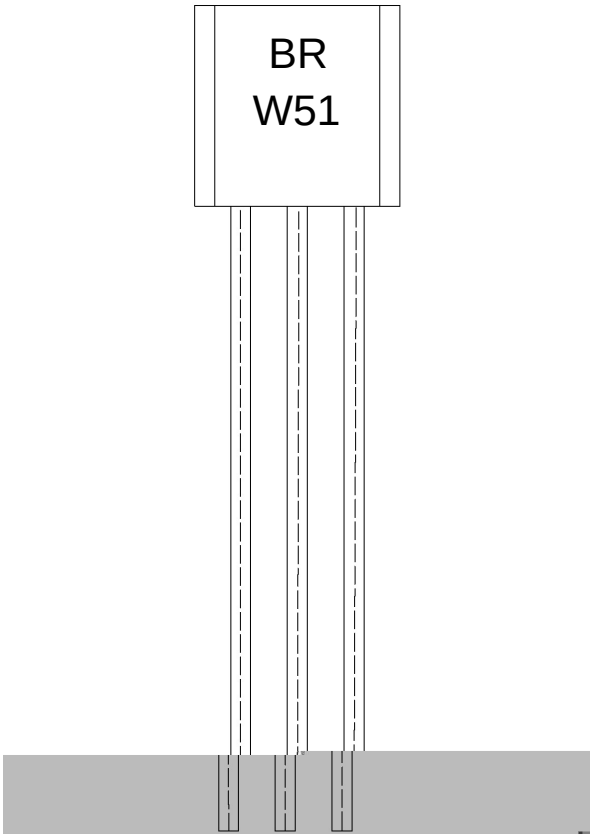




/ Package Dimensions



/ Marking Instructions



BR:

W51

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Note:

BR:	Company Code.
W51:	Product Type.
****:	Lot No. Code,code change with Lot No.

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

				Note:
1	25 150	60	90sec;	1.Preheating:25~150 , Time:60~90sec.
2	255±5		5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3		2 10	/sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp:270±5	Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	只 袋	袋 盒	只 盒	盒 箱	只 箱	袋	盒	箱

/ AMMO

Package Type 封装形式	Units 包装数量		Dimension 包装尺寸 (unit: mm3)
	只 纸带	纸带 盒	