

/ Descriptions

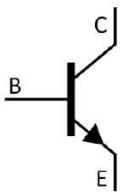
TO-92

NPN

Silicon NPN transistor in a TO-92 Plastic Package.

/ FeaturesHigh V_{CEO} , high P_C .

Medium power high voltage applications..



PIN1 Collector

PIN 2 Base

PIN 3 Emitter

/ hFE Classifications & Marking

See Marking Instructions.



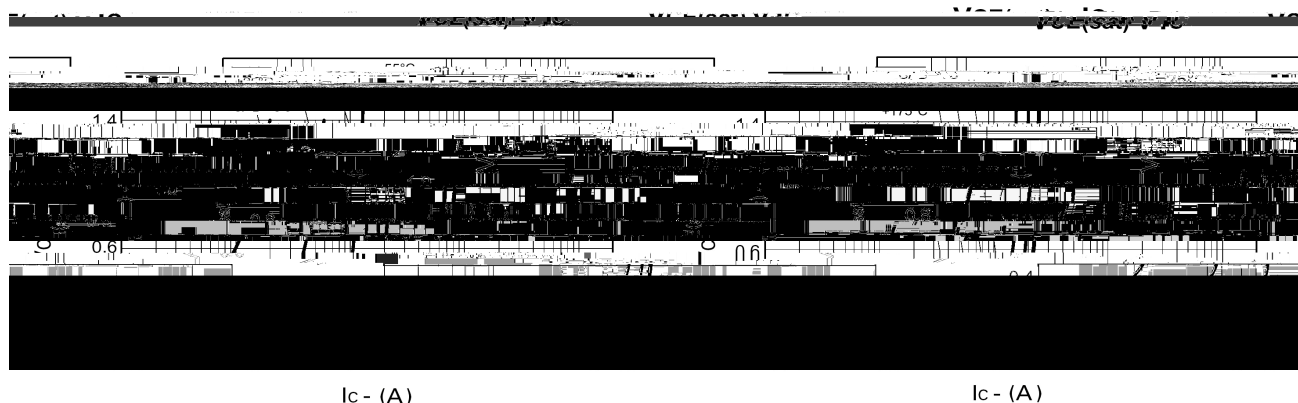
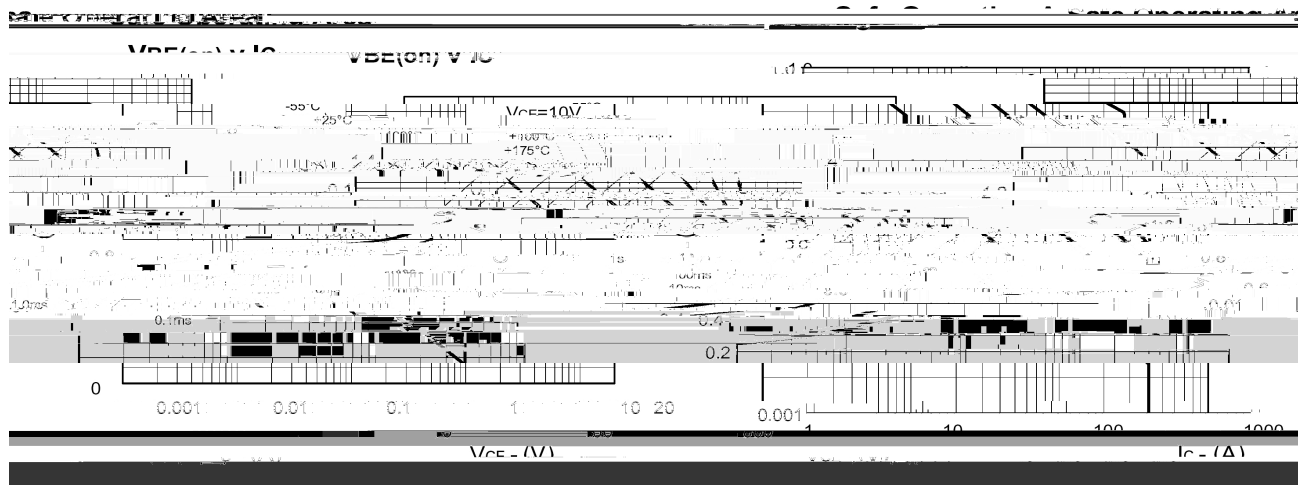
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	400	V
Collector to Emitter Voltage	V_{CEO}	400	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	300	mA
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\mu A$ $I_E=0$	400			V
Collector to Emitter Breakdown Voltage*	$*V_{CEO}$	$I_C=10mA$ $I_B=0$	400			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=100\mu A$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=320V$ $I_E=0$			0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=320V$ $I_B=0$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0V$ $I_C=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=50mA$	100		300	
	$h_{FE(2)}$	$V_{CE}=10V$ $I_C=1.0mA$	100			
	$*h_{FE(3)}$	$V_{CE}=10V$ $I_C=100mA$	15			

Collector-Emitter Saturation Voltage

$V_{CE(sa10.5\ 0\ 0\ 10.5\ 346.f218.96.96\ 321.06\ m- T068.3\ 278.54\ 0.478}$

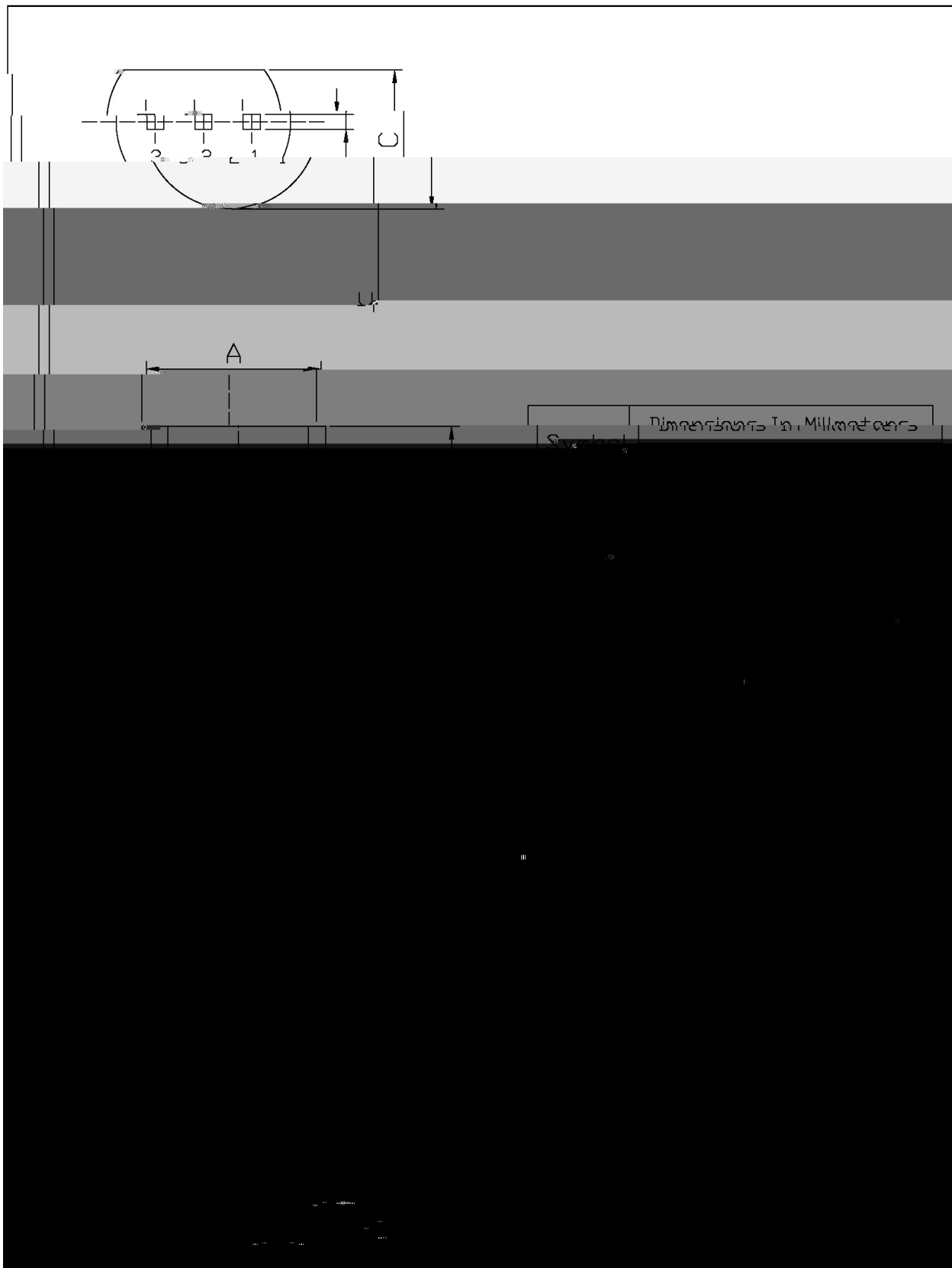
/ Electrical Characteristic Curve



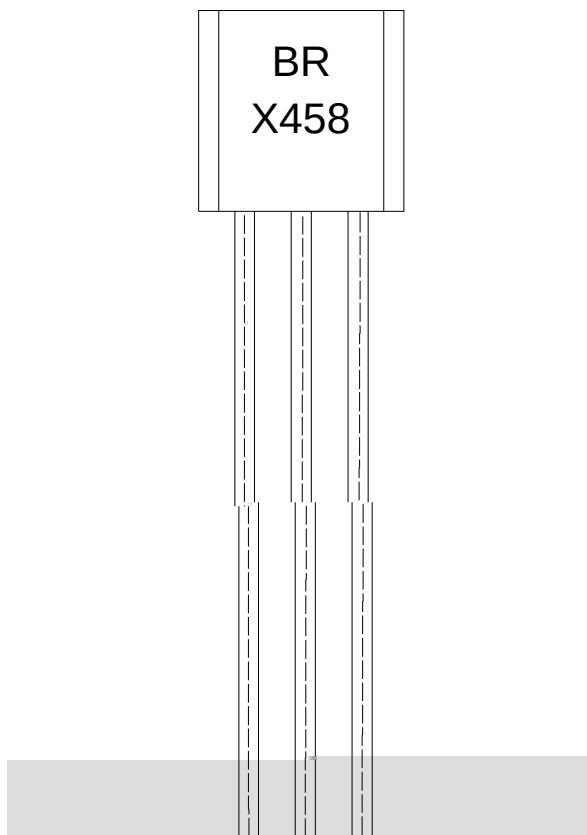
/ Package Dimensions

T0-92

Unit: mm



/ Marking Instructions



BR:

X458

Note:

BR: Company Code.

X458: 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	Units					Dimension (unit mm3)		

/ AMMO

Package Type	Units					Dimension (unit mm3)		