

KSC2316
Rev.E Mar.-2016

TO-92LM NPN Silicon NPN transistor in a TO-92LM Plastic Package.

KSA916
Complement to KSA916.

Audio power amplifier and driver stage amplifier applications.

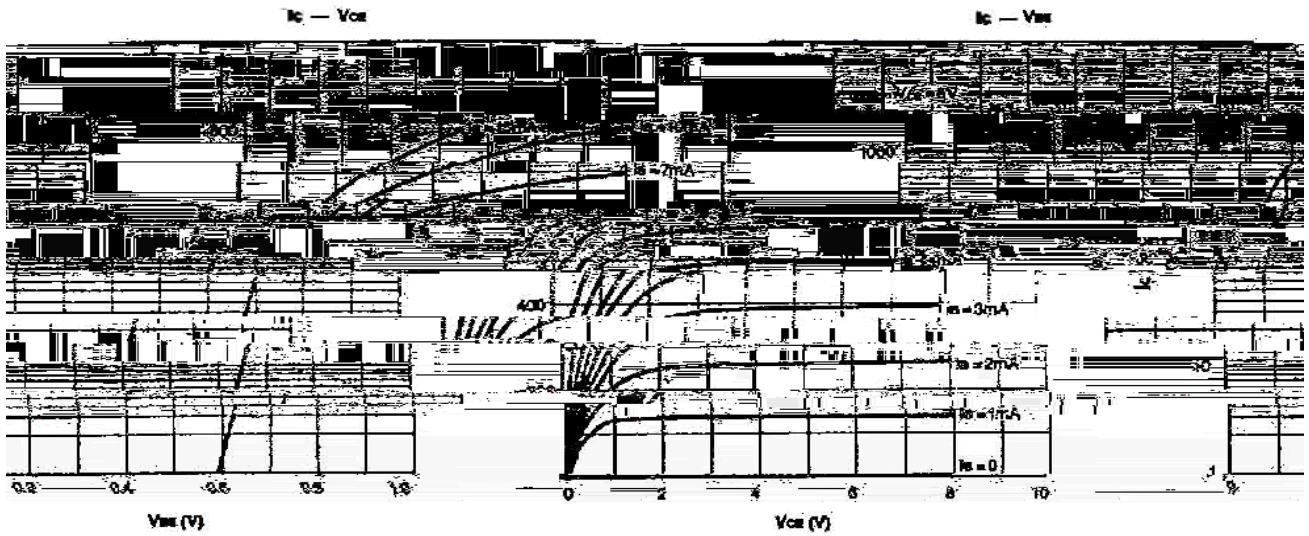
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	120	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current (DC)	I_C	800	mA
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

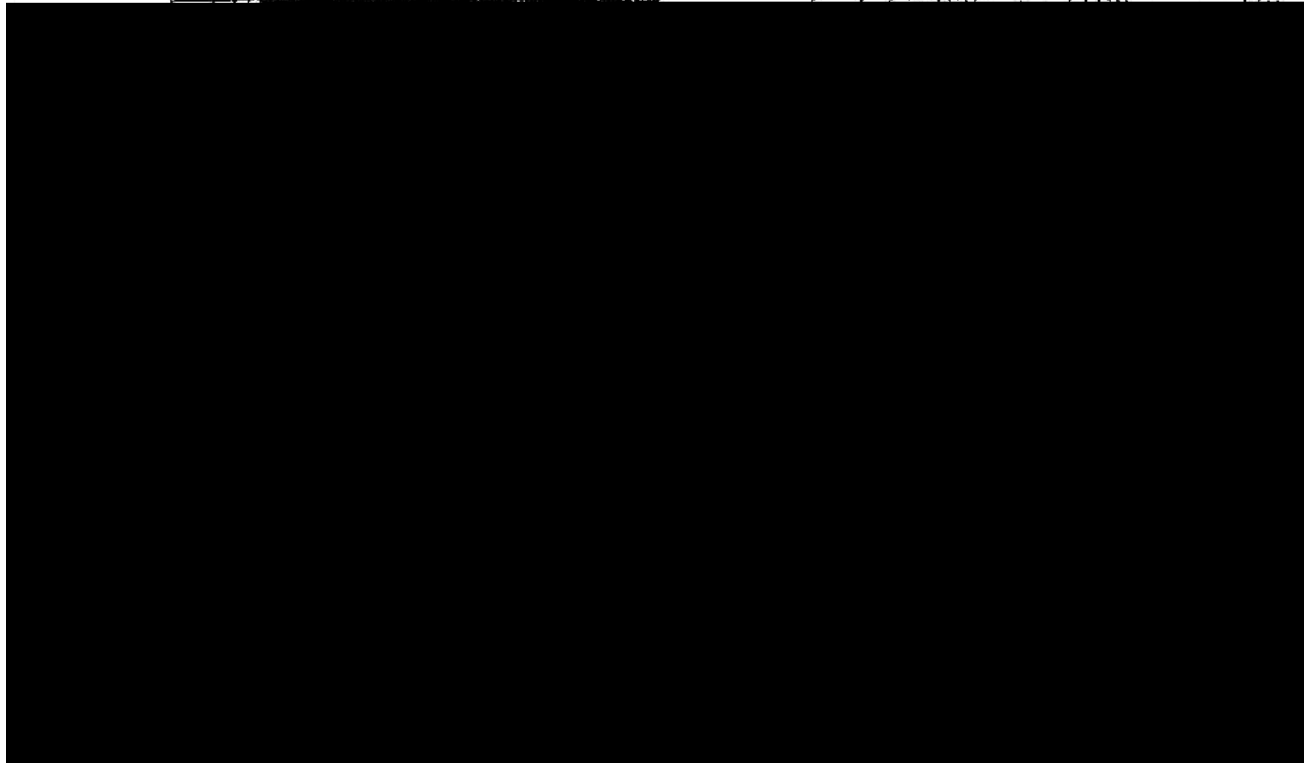
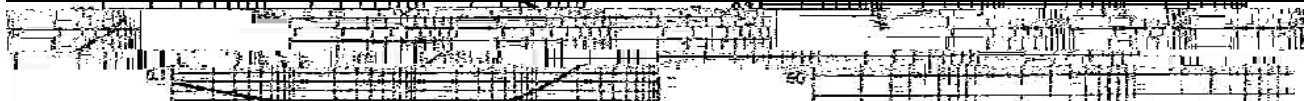
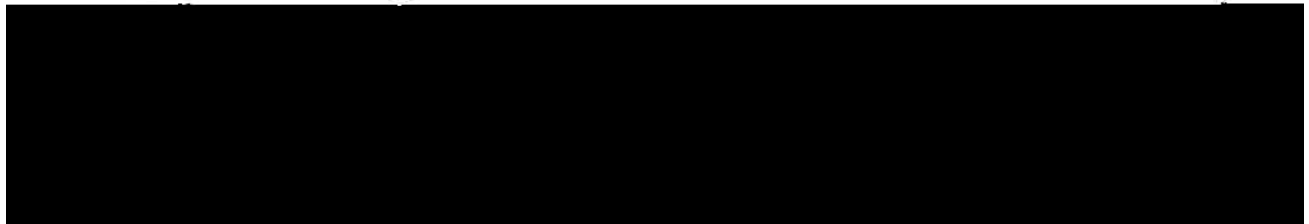
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1.0mA$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	120			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-1.0mA$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=120V$ $I_E=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=100mA$	80		240	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=10mA$	60			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			1.0	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=100mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$			30	pF

/ Electrical Characteristic Curve



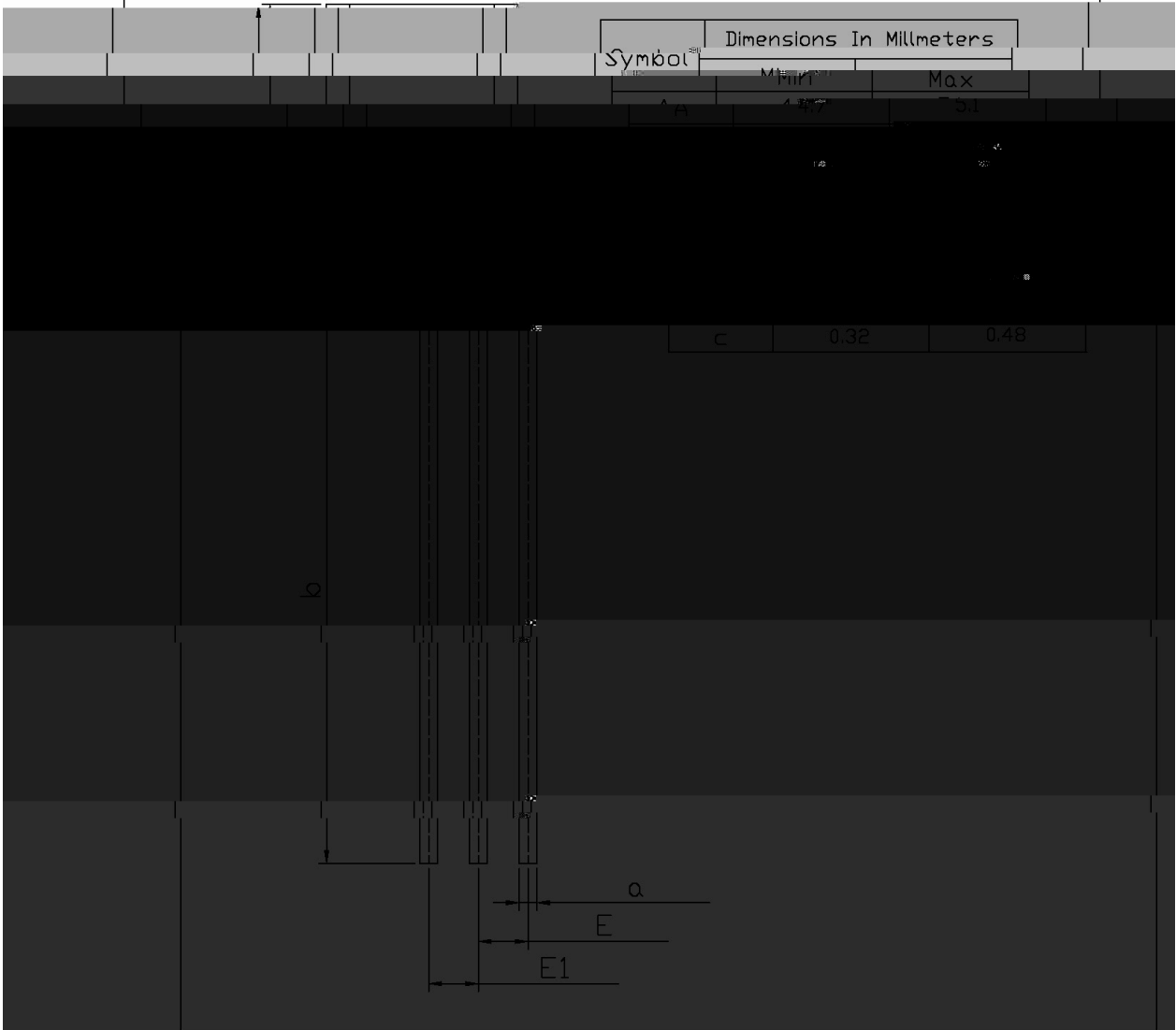
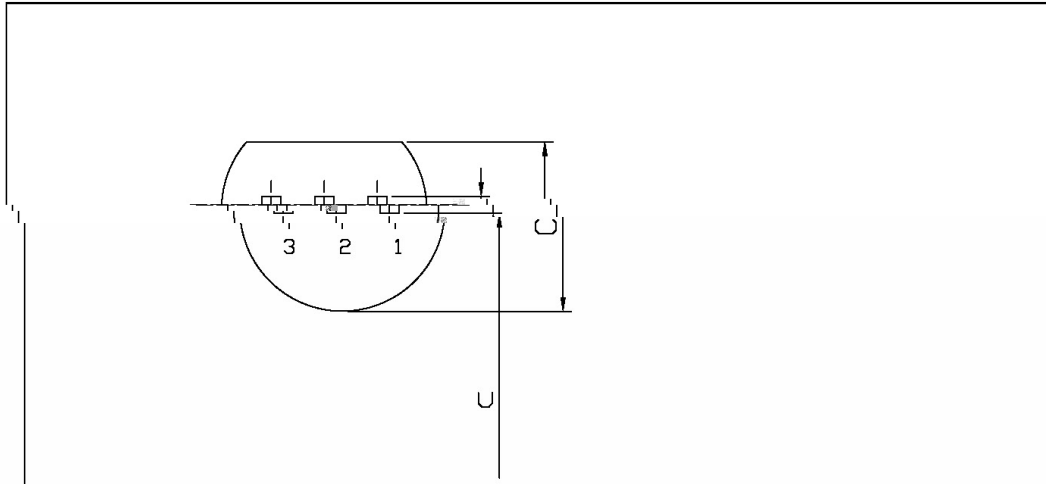
$V_{ce} (mA) - I_c$

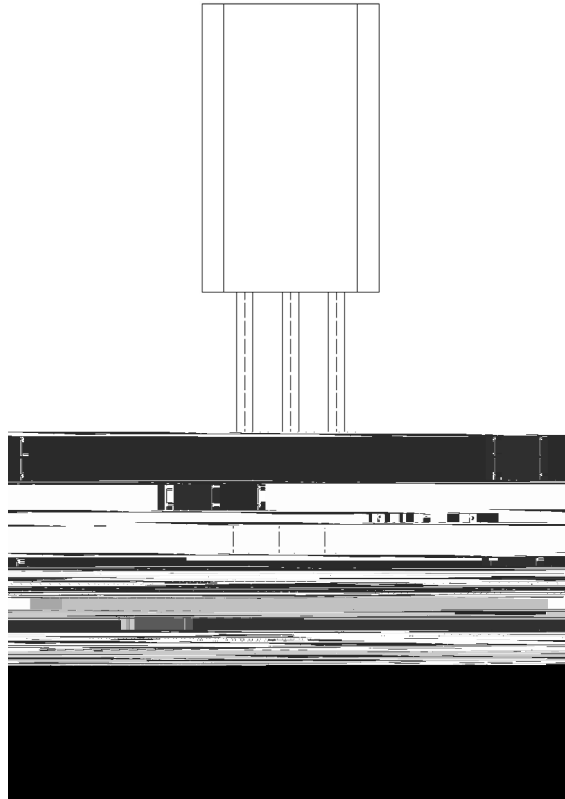


/ Package Dimensions

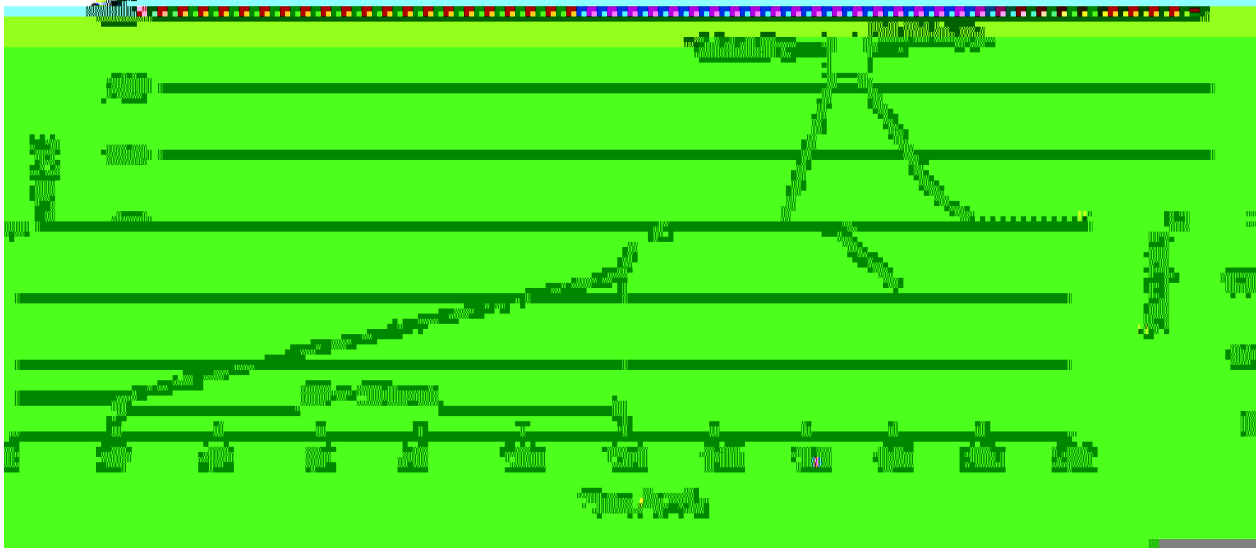
T0-92LM

Unit: mm





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



- | | | | | | | |
|---|-------|-----|-----------|----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | Note: | 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)
--------------	-------	-----------	------------