

/ Descriptions

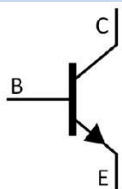
TO-92LM NPN Silicon NPN transistor in a TO-92LM Plastic Package.

/ Features

KTA1274
Complementary to KTA1274.

/ Applications

General purpose amplifier application.



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

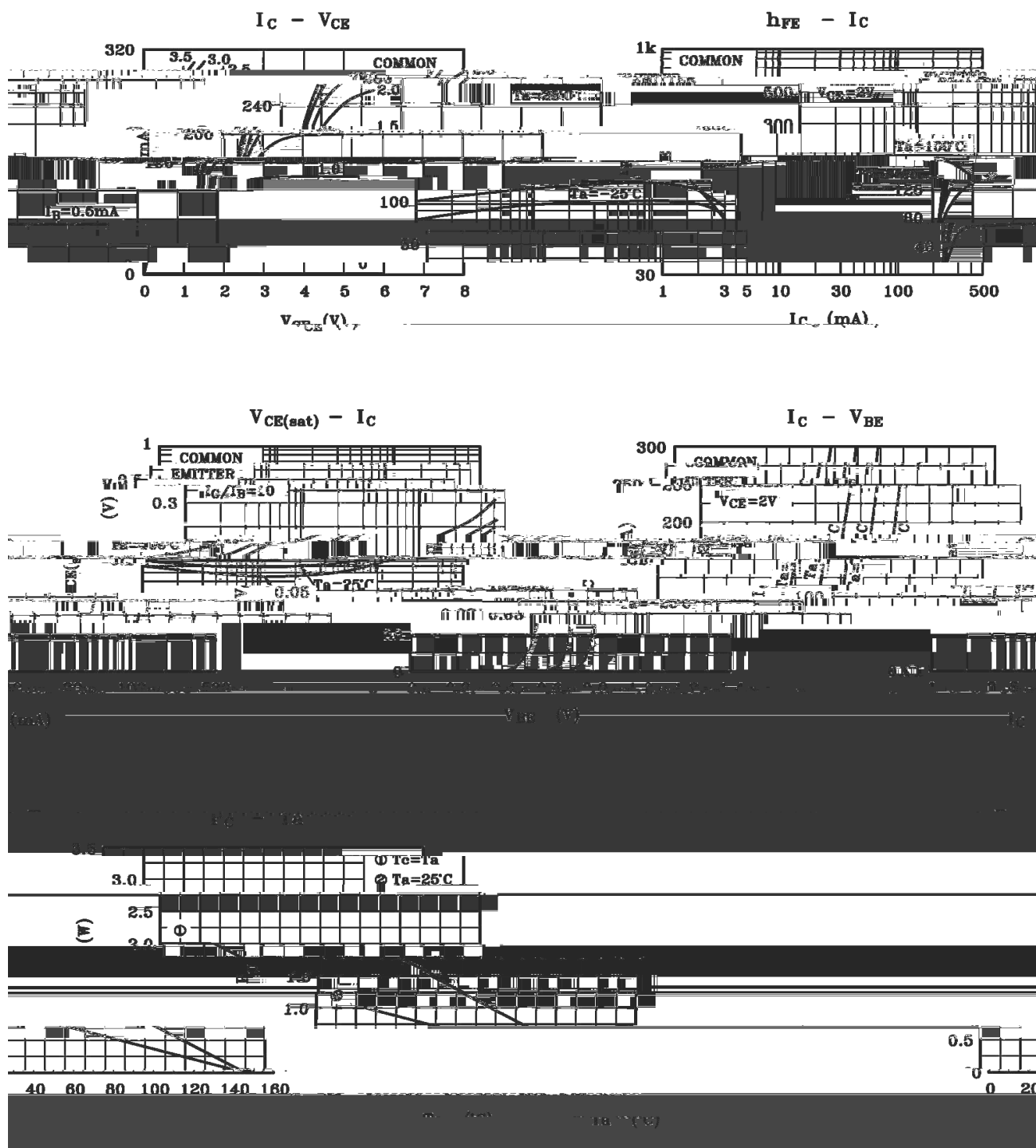
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	400	mA
Base Current - Continuous	I_E	-400	mA
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 Cut-Off Current	I_{CBO}	$V_{CB}=50V$ $I_E=0$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	μA
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=5mA$ $I_B=0mA$	80			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2.0V$ $I_C=50mA$	70		240	
	$h_{FE(2)}$	$V_{CE}=2.0V$ $I_C=200mA$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200mA$ $I_B=20mA$			0.4	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=2.0V$ $I_C=5mA$	0.55		0.8	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=10mA$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $f=1MHz$		10		pF

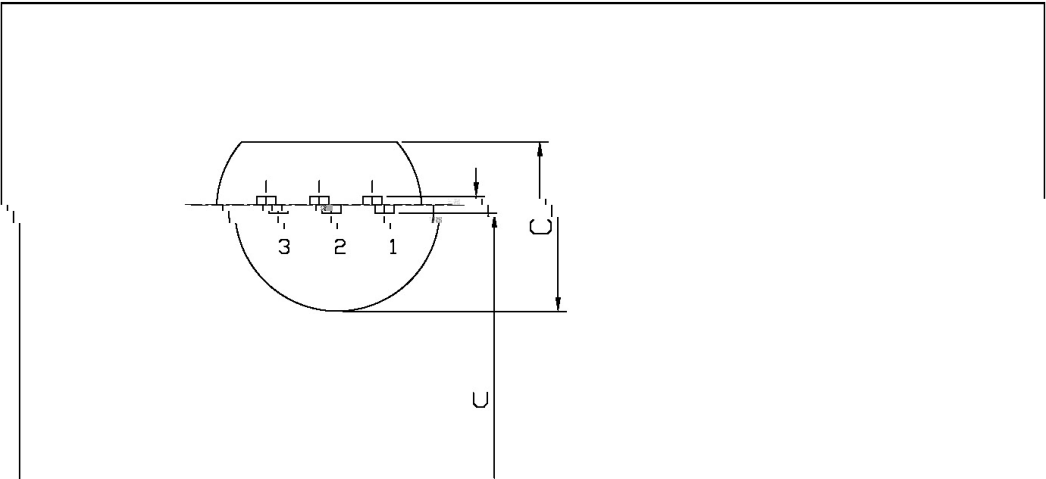
/ Electrical Characteristic Curve



/ Package Dimensions

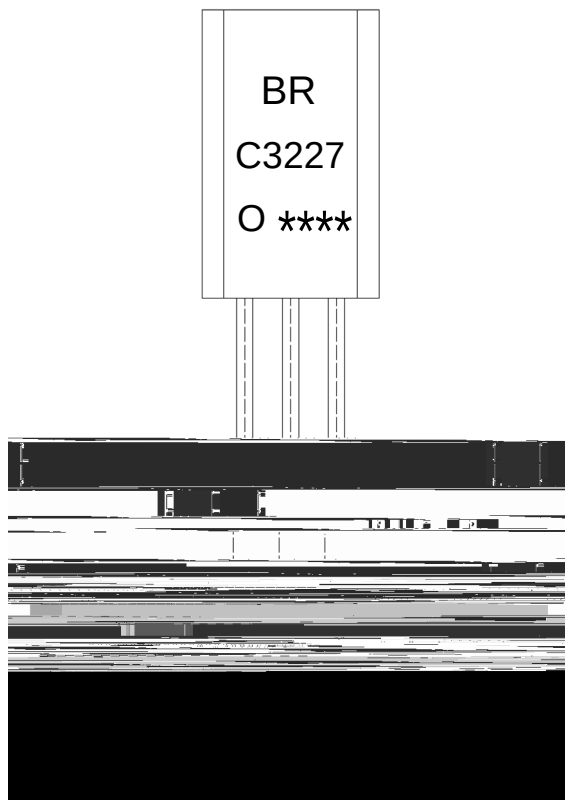
TO-92LM

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.7	5.1
B	1.2	1.5
C	0.8	1.0
D	0.5	0.7
E	0.5	0.7
F	0.5	0.7
G	0.5	0.7
H	0.5	0.7
I	0.5	0.7
J	0.5	0.7
K	0.5	0.7
L	0.5	0.7
M	0.5	0.7
N	0.5	0.7
O	0.5	0.7
P	0.5	0.7
Q	0.5	0.7
R	0.5	0.7
S	0.5	0.7
T	0.5	0.7
U	0.5	0.7
V	0.5	0.7
W	0.5	0.7
X	0.5	0.7
Y	0.5	0.7
Z	0.5	0.7

/ Marking Instructions



BR:

C3227

O: h_{FE}

Note:

BR: Company Code.

C3227: Product Type.

O: h_{FE} Classifications Symbol

****: 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)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92LM	1,000	8	8,000	5	40,000	135×190	237×172×102	560×245×195

/ AMMO

Package Type	Units					Dimension (unit mm3)	
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92LM	2,500	1	100	10	25,000	328×230×42	480×346×235 547×407×268

/ Notices