

KTA1277
Rev.F Mar.-2016

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

High V_{CBO} , low $V_{CE(sat)}$, high speed switching.

DC-DC converter, low power switching regulator, high voltage application.

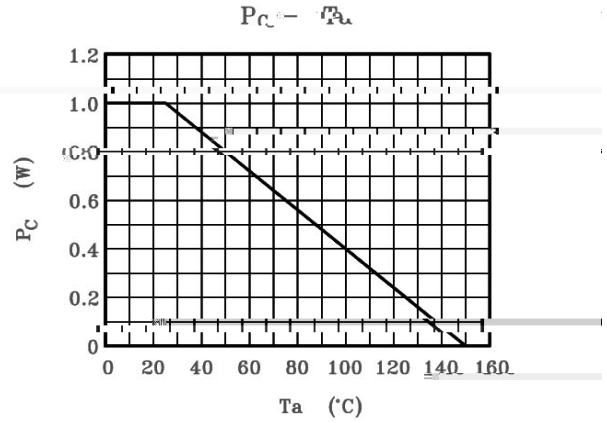
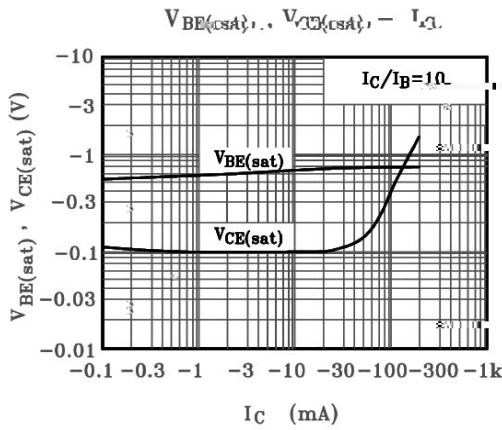
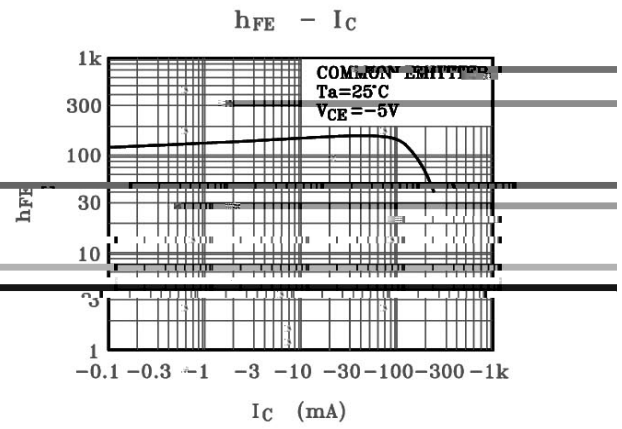
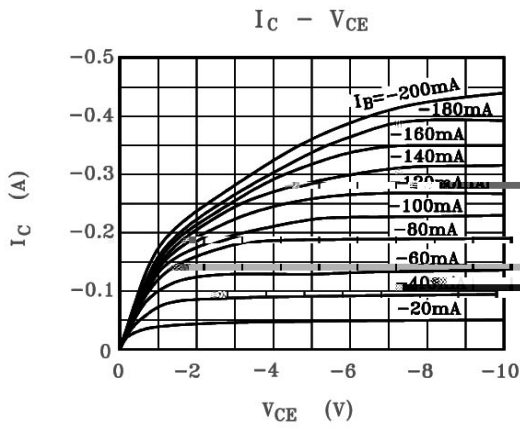
/ Absolute Maximum Ratings(Ta=25)

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}	-7.0	V
Collector Current - Continuous	I_C	-500	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 to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$ $I_B=0$	-400			V
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-100\mu A$ $I_E=0$	-400			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-100\mu A$ $I_C=0$	-7.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-400V$ $I_E=0$			-10	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-10	μA
DC Current Gain	h_{FE}	$V_{CE}=-5.0V$ $I_C=-100mA$	60		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA$ $I_B=-10mA$			-1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-100mA$ $I_B=-10mA$			-1.2	V
Turn-On Time	t_{on}	$I_C=-100mA$ $R_L=1.5K$ $I_{B1}=-10mA$ $I_{B2}=20mA$ $V_{CC}=-150V$			1.0	μs
Storage Time	t_{stg}				4.0	
Turn-Off Time	t_{ff}				1.0	

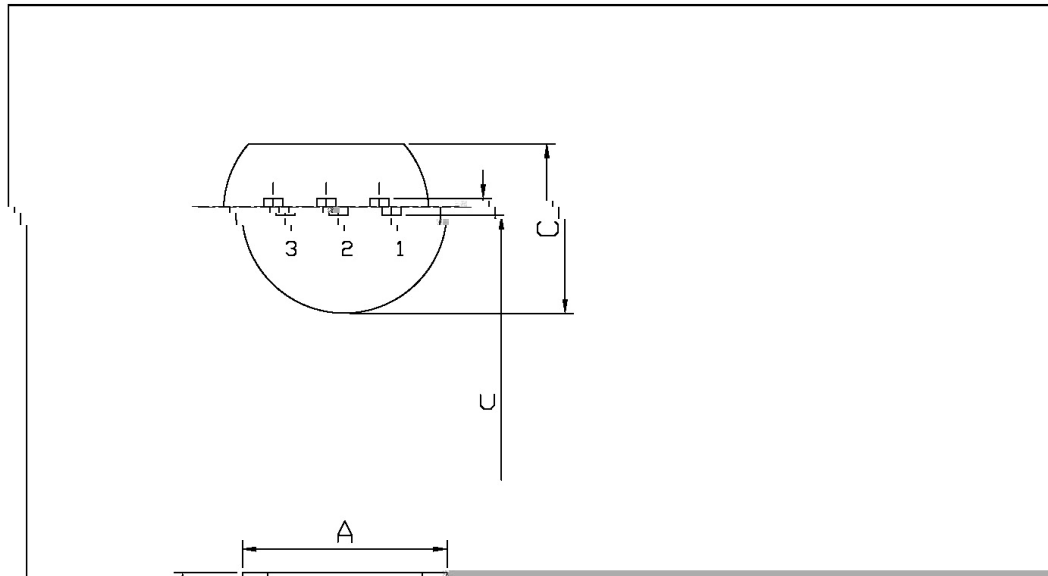
/ Electrical Characteristic Curve



/ Package Dimensions

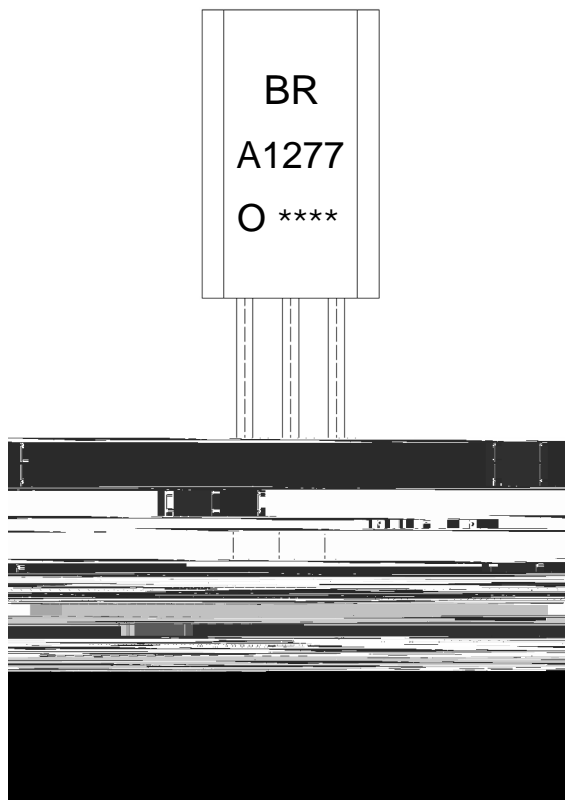
TO-92LM

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	1.47	5.1
C	3.8	4.2
U	1.7	2.0

/ Marking Instructions



BR:

A1277

O: h_{FE}

Note:

BR: Company Code.

A1277: 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±0.5 | sec; | 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