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XT4082

/

PMOSFET

4.2V 1%

1A

USB

XT4082

1uA

65uA XT4082 EN EN GND

EN VIN

■

**PROG** 1%

1.2V IBAT = (1.2/$R_{PROG}$) 1000

**IMIN** 1% 1.2V

IMIN = (1.2/$R_{EOC}$) 1000

**CE** CE GND CE

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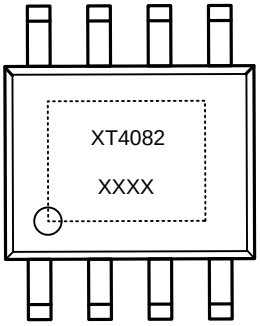
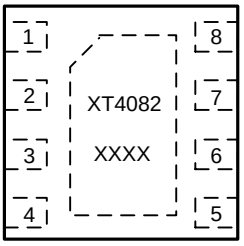
ESOP8, DFNWB2*2-8L DFNWB2*3-8L DFNWB3*3-8L




ESOP8
(TOP VIEW)




DFNWB3*3-8L/DFNWB2*3-8L/DFNWB2*2-8L
(TOP VIEW)

| | |
|---|---|
| | XT4082 |
| | |
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| | | | |
|---|---|---|---|
| | VIN | -0.3 30 | V |
| EN | Ven | -0.3 6 | |
| BAT | Vbat | -0.3 6 | |
| CHAG PPR | Vchrg Vppr | -0.3 6 | |
| PROG IMIN | Vprog Vimin | -0.3 6 | |
| | | ESOP8 58 | |

DFNWB3*3

$C/W$

*JAT*

■

| | | | | | | UNIT |
|---|---|---|---|---|---|---|
| | VIN | - | - | - | 26.5 | V |
| | Icc | Charge mode, $R_{PROG}$ =2.4K | - | 280 | 400 | μA |
| | | Shutdown mode $R_{PROG}$ =2.4K EN disabled | - | 115 | 200 | μA |
| | Vfloat | 0 <TA<85 , IBAT = 40mA | 4.16 | 4.2 | 4.25 | V |
| | | $R_{PROG}$ =6k,Current mode | 180 | 200 | 220 | mA |
| | | $R_{PROG}$ =1.2k,Current mode | 900 | 1000 | 1100 | mA |
| BAT | $I_{BAT}$ | Standby mode, $V_{BAT}$=4.2V | 0 | -2.5 | | |

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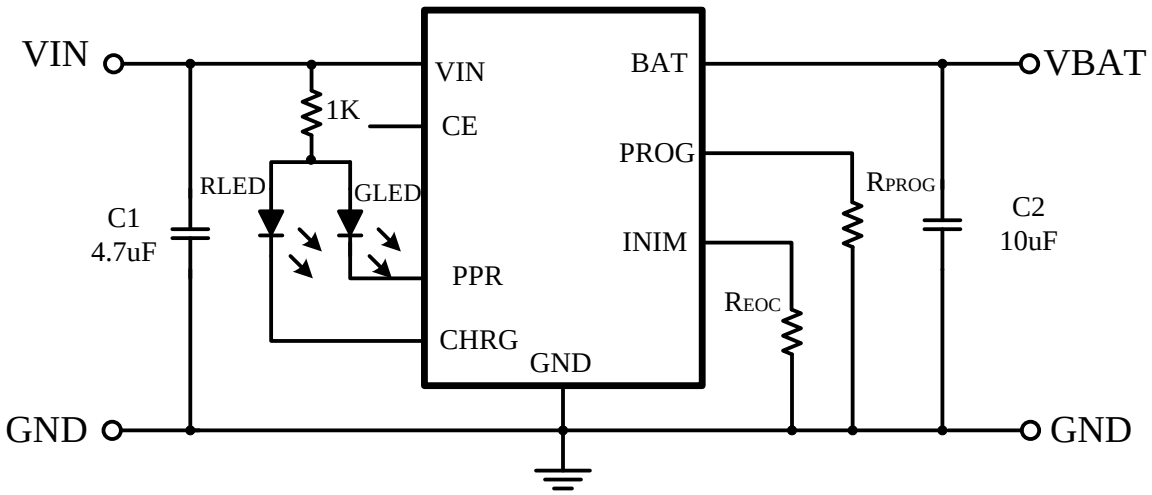


$I_{BAT} = 1200 / R_{PROG}$ IBAT $R_{PROG}$ PROG

500 $R_{PROG} = 1200/0.5 = 2.4K\Omega$

$R_{PROG}$ 1%

EOC GND $R_{EOC}$ , $I_{EOC} = (1.2/R_{EOC})*1000$ $I_{EOC}$

$R_{EOC}$ IMIN 50

$R_{EOC} = 1200/0.05 = 24K\Omega$

$R_{EOC}$ 1%

5% 10mA

4.7uF 10uF PCB

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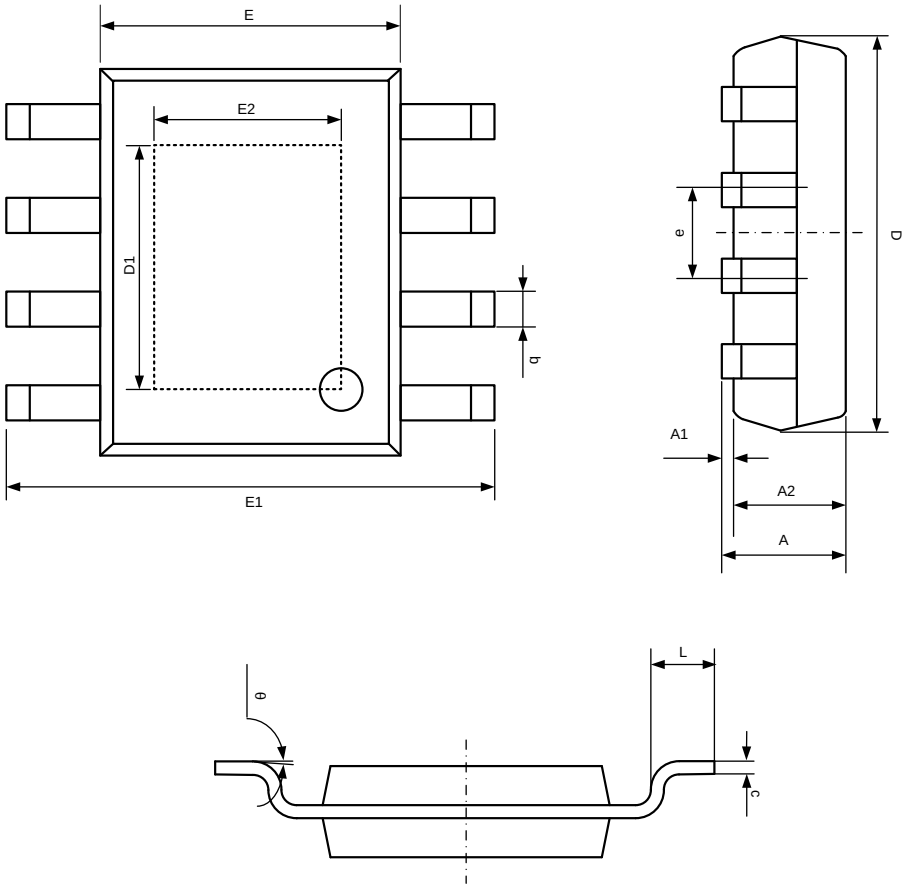
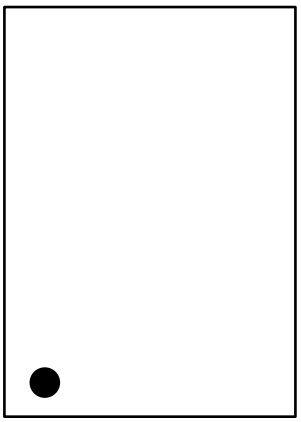
**ESOP8**



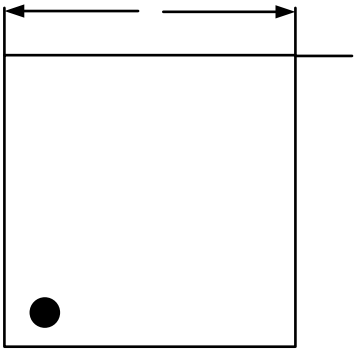

| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 1.350 | 1.750 | 0.053 | 0.069 |
| A1 | 0.050 | 0.150 | 0.002 | 0.006 |
| A2 | 1.350 | 1.550 | 0.053 | 0.061 |
| b | 0.330 | 0.510 | 0.013 | 0.020 |
| c | 0.170 | 0.250 | 0.007 | 0.010 |
| D | 4.700 | 5.100 | 0.185 | 0.200 |
| D1 | 3.202 | 3.420 | 0.126 | 0.134 |
| E | 3.800 | 4.000 | 0.150 | 0.157 |
| E1 | 5.800 | 6.200 | 0.228 | 0.244 |
| E2 | 2.313 | 2.513 | 0.091 | 0.099 |
| e | 1.270(BSC) | | 0.050(BSC) | |
| L | 0.400 | 1.270 | 0.016 | 0.050 |
| θ | 0 | 8 | 0 | 8 |

**DFNWB2*3-8L**



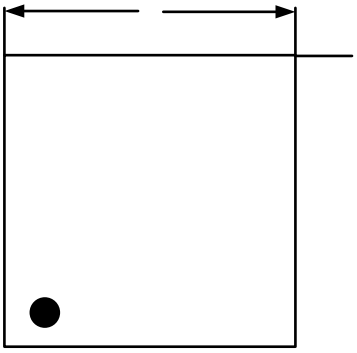
| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.700/0.800 | 0.800/0.900 | 0.028/0.031 | |

**DFNWB3*3-8L**



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.700/0.800 | 0.800/0.900 | 0.028/0.031 | 0.031/0.035 |
| A1 | 0.000 | 0.050 | 0.000 | 0.002 |
| A3 | 0.203REF | | 0.008REF | |
| D | 2.924 | 3.076 | 0.115 | 0.121 |
| E | 2.924 | 3.076 | 0.115 | 0.121 |
| D1 | 2.300 | 2.500 | 0.091 | 0.098 |
| E1 | 1.600 | 1.800 | 0.063 | 0.071 |
| k | 0.200MIN | | 0.008MIN | |
| b | 0.200 | 0.300 | 0.008 | 0.012 |
| e | 0.500TYP | | 0.020TYP | |
| L | 0.324 | 0.476 | 0.013 | 0.019 |

**DFNWB 2*2-8L**



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.450/0.500/0.550 | 0.550/0.600/0.650 | 0.018/0.020/0.022 | 0.022/0.024/0.026 |
| A1 | 0.000 | 0.050 | 0.000 | 0.002 |
| A3 | 0.152REF | | 0.006REF | |
| D | 1.924 | 2.076 | 0.076 | 0.082 |
| E | 1.924 | 2.076 | 0.076 | 0.082 |