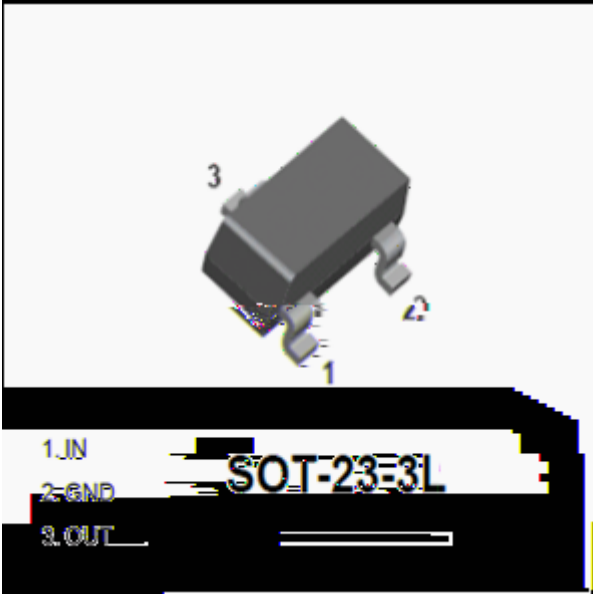


Digital i



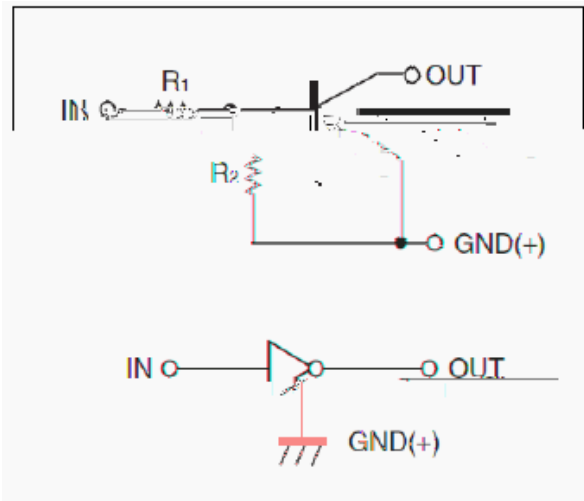
Mechanical Data

Package: SOT-23-3L

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking: 14

Equivalent circuit



Maximum Ratings (Ta=25 Unless otherwise specified)

| ITEM | SYMBOL | UNIT | VALUE |
|---|-------------------|------|-------------|
| Supply Voltage | VCC | V | -50 |
| Input Voltage | VIN | V | -40 to +10 |
| Output Current | IO | mA | -100 |
| Power Dissipation | PD | mW | 200 |
| Thermal Resistance, Junction to Ambient | R _{thJA} | /W | 625 |
| Junction Temperature | T _j | | 150 |
| Storage Temperature | T _{stg} | | -55 to +150 |



DTA114EKA

Electrical Characteristics (Ta=25 unless otherwise specified)

| ITEM | SYMBOL | UNIT | CONDITIONS | MIN | TYP | MAX |
|----------------------|----------------|------|----------------------------|------|-----|-------|
| Input voltage | $V_{I(off)}$ | V | VCC=-5V, Ic=-100uA | -0.5 | | |
| | $V_{I(on)}$ | V | VO=-0.3V, Ic=-10mA | | | -3 |
| Output voltage | $V_{O(on)}$ | V | Io /Ii =-10mA/-0.5 mA | | | -0.3 |
| Input current | I _I | mA | VI=-5V | | | -0.88 |
| Output current | $I_{O(off)}$ | uA | VCC=-50V, Vi=0 | | | -0.5 |
| DC current gain | GI | | Vo=-5V, Io =-5mA | 30 | | |
| Input resistance | R_1 | k | | 7 | 10 | 13 |
| Resistance ratio | R_2/R_1 | | | 0.8 | 1 | 1.2 |
| Transition frequency | f _T | MHz | Vo=-10V, IO=-5mA, f=100MHz | | 250 | |

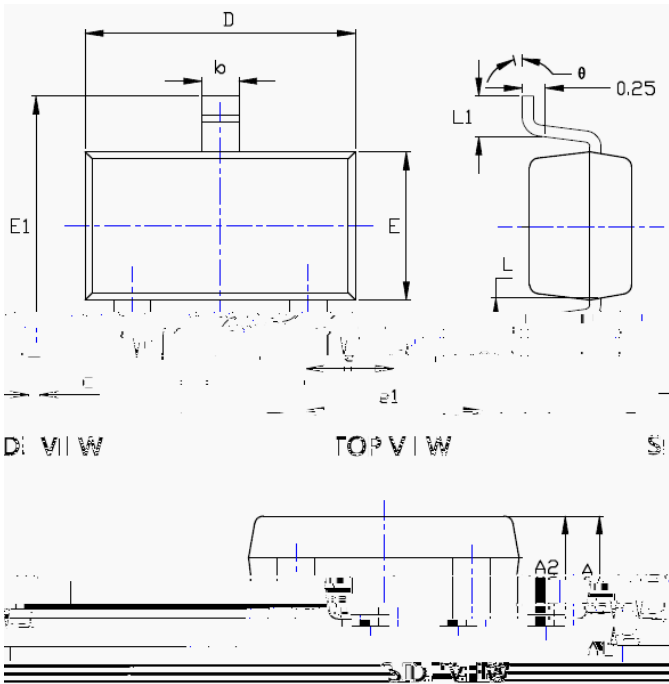
Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| DTA114EKA | F2 | Approximate 0.014 | 3000 | 30000 | 120000 | 7" reel |



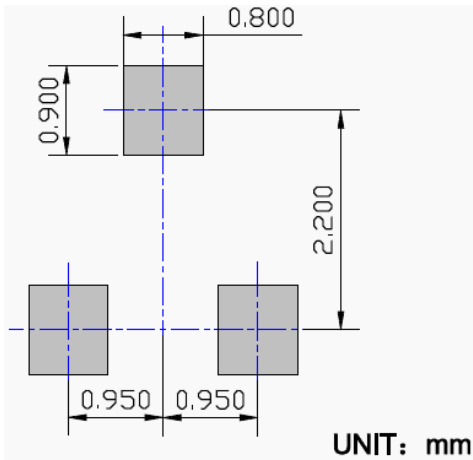
DTA114EKA

SOT-23-3L Package Outline Dimensions



| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|------------|-------|
| | INCHES | | Millimeter | |
| | MIN. | MAX. | MIN. | MAX. |
| A | 0.041 | 0.049 | 1.050 | 1.250 |
| A1 | 0.000 | 0.008 | 0.000 | 0.200 |
| A2 | 0.041 | 0.045 | 1.050 | 1.150 |

SOT-23-3L Suggested Pad Layout



'7\$ (. \$

'LVFODLPHU

7KH LQIRUPDWLRQ SGRVH DMQHG LQ IRWLVH DQJH RKH BQJMLH (OHFWURQLF 7HFKQRO
ULJKW WR PDNH FKDLFH VRZLWKR XWS KRLS LURDG XIERQ/ RGLWSOD\HG KHUHLQ WR GLPVLWR
RU RWKHU ZLVH

7KH SURGXFW OLVWHG KHUHLQ LV GHVHWHG RQR FEHTXVLS BHZLW KR UR LGHLYLDFH VVW DQG
HTXLSPHQW RU GHYLFHV ZKLFK UHTGLW KH KPD OXHQFHV GRG LURH OLVWHG BQJMLH BQJMLH
PHGLFDO LQVWUXPHQW VIT WLS DQJH SVR U DQJH V SODFH O D D B K L B D F W R U P @ P A W Q R S P H Z U r 16 L A