

7 Digital Transistors <Surface Mounted Types>

7828999 0007746 132 RHM

(5 pin type including 2 circuits)

Two transistors with built-in resistors (digital transistors) are packed into 2125 and 2916 type packages. Being wired internally they require minimum space.

■ UM5 · FMT

● Built-in 2 resistors

| Equivalent circuit | Application | Package | | Equivalent product | Resistance value | | V _{cc} (V) | I _o (mA) | G _i | Vo (V) | | I _o (mA) | |
|--------------------|-------------------|--------------|-------|----------------------|-----------------------|---------------------|---------------------|---------------------|----------------|---------|---------|--|--|
| | | UM5 | FMT | | R ₁ (kΩ) | R ₂ (kΩ) | | | | | | | |
| TOP VIEW | | Type | | | | | | | | | | | |
| | Inverter Driver | UMA1 | FMA1 | DTA124EK × 2 | 22 | 22 | -50 | -30 | 56~ | -5 | -5 | | |
| | | UMA2 | FMA2 | DTA144EK × 2 | 47 | 47 | -50 | -30 | 68~ | -5 | -5 | | |
| | | UMA5 | FMA5 | DTA123JK × 2 | 2.2 | 47 | -50 | -100 | 80~ | -5 | -10 | | |
| | | UMA7 | FMA7 | DTA143XK × 2 | 4.7 | 10 | -50 | -100 | 30~ | -5 | -10 | | |
| | | UMA8 | FMA8 | DTA114YK × 2 | 10 | 47 | -50 | -100 | 68~ | -5 | -5 | | |
| | | UMA9 | FMA9 | DTA114EK × 2 | 10 | 10 | -50 | -50 | 30~ | -5 | -5 | | |
| | | UMA10 | FMA10 | DTA113ZK × 2 | 1.0 | 10 | -50 | -100 | 33~ | -5 | -5 | | |
| | | UMA11 | FMA11 | DTA143ZK × 2 | 4.7 | 47 | -50 | 30 | 80~ | -5 | -10 | | |
| | | UMG1 | FMG1 | DTC124EK × 2 | 22 | 22 | 50 | 30 | 56~ | 5 | 5 | | |
| | | UMG2 | FMG2 | DTC144EK × 2 | 47 | 47 | 50 | 30 | 68~ | 5 | 5 | | |
| | | UMG5 | FMG5 | DTC114YK × 2 | 10 | 47 | 50 | 70 | 68~ | 5 | 5 | | |
| UMG8 | FMG8 | DTC143ZK × 2 | 4.7 | 47 | 50 | 30 | 80~ | 5 | 10 | | | | |
| UMG9 | FMG9 | DTC114EK × 2 | 10 | 10 | 50 | 50 | 30~ | 5 | 5 | | | | |
| UMG11 | FMG11 | DTC123JK × 2 | 2.2 | 47 | 50 | 100 | 80~ | 5 | 10 | | | | |
| | | - | FMJ1 | DTA144EK | 47 | 47 | -50 | -30 | 68~ | -5 | -5 | V _R =80V, I _o =100mA C _T =3.5pF, t _r =4.0ns | |
| | | | | DA119 | Diode characteristics | | | | | | | | |
| | Switching Circuit | UMC2 | FMC2 | DTA124EK DTC124EK | 22 22 | 22 22 | -50 50 | -30 30 | 56~ 56~ | -5 5 | -5 5 | | |
| | | UMC3 | FMC3 | DTA114EK DTC114EK | 10 10 | 10 10 | -50 50 | -50 50 | 30~ 30~ | -5 5 | -5 5 | | |
| | | UMC4 | FMC4 | DTA114YK DTC144EK | 10 47 | 47 47 | -50 50 | -70 30 | 68~ 68~ | -5 5 | -5 5 | | |
| | | UMC5 | FMC5 | DTA143XK DTC144EK | 4.7 47 | 10 47 | -50 50 | -100 30 | 30~ 68~ | -5 5 | -5 5 | | |
| | | - | FMC6 | DTA115EK DTC115EK | 100 100 | 100 100 | -50 50 | -20 20 | 82~ 82~ | -5 5 | -5 5 | | |

● Built-in 1 resistor

| Equivalent circuit | Application | Package | | Equivalent product | Resistance value | | V _{CE0} (V) | I _c (mA) | h _{FE} | V _{CE} (V) | | I _c (mA) | |
|--------------------|-------------------|---------|------|--------------------|---------------------|---------------------|----------------------|---------------------|-----------------|---------------------|----|---------------------|--|
| | | UM5 | FMT | | R ₁ (kΩ) | R ₂ (kΩ) | | | | | | | |
| TOP VIEW | | Type | | | | | | | | | | | |
| | Inverter Driver | UMA3 | FMA3 | DTA143TK × 2 | 4.7 | | -50 | -100 | 100~600 | -5 | -1 | | |
| | | UMA4 | FMA4 | DTA114TK × 2 | 10 | | -50 | -100 | 100~600 | -5 | -1 | | |
| | | UMA6 | FMA6 | DTA144TK × 2 | 47 | | -50 | -100 | 100~600 | -5 | -1 | | |
| | | UMG3 | FMG3 | DTC143TK × 2 | 4.7 | | 50 | 100 | 100~600 | 5 | 1 | | |
| | | UMG4 | FMG4 | DTC114TK × 2 | 10 | | 50 | 100 | 100~600 | 5 | 1 | | |
| | | UMG6 | FMG6 | DTC144TK × 2 | 47 | | 50 | 100 | 100~600 | 5 | 1 | | |
| | Switching Circuit | | | DTA143TK | 4.7 | | -50 | -100 | 100~600 | -5 | -1 | | |
| | | UMC1 | FMC1 | DTC143TK | 4.7 | | 50 | 100 | 100~600 | 5 | 1 | | |
| | Pre Amp (6dB Amp) | | | 2SA1037K | R ₁ (Ω) | R ₂ (Ω) | -20 | -50 | 120~560 | -6 | -1 | | |
| | | - | FMQ1 | 2SC2412K | 470 | 470 | 20 | 30 | 120~560 | 6 | 1 | | |

7828999 0007747 079 RHM

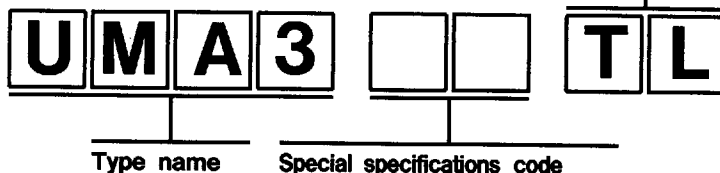
Ordering Designation

Specify type code in order sheet.

Type designation consists of type name, special specifications and package specifications.

| | | |
|---------|-----|------|
| Package | UM5 | FMT |
| Code | TL | T149 |
| | TR | T148 |

Package specifications code



(Unit : mm)

| Package | UM5 | FMT |
|----------------------------|-----|-----|
| Dimensions | | |
| Real size | ■ | ■ |
| Magnification shape (×3.0) | | |

TP Digital Transistors <Surface Mounted Types>

[5pin type including 2 circuits]

■ 7828999 0007748 T05 ■ RHM

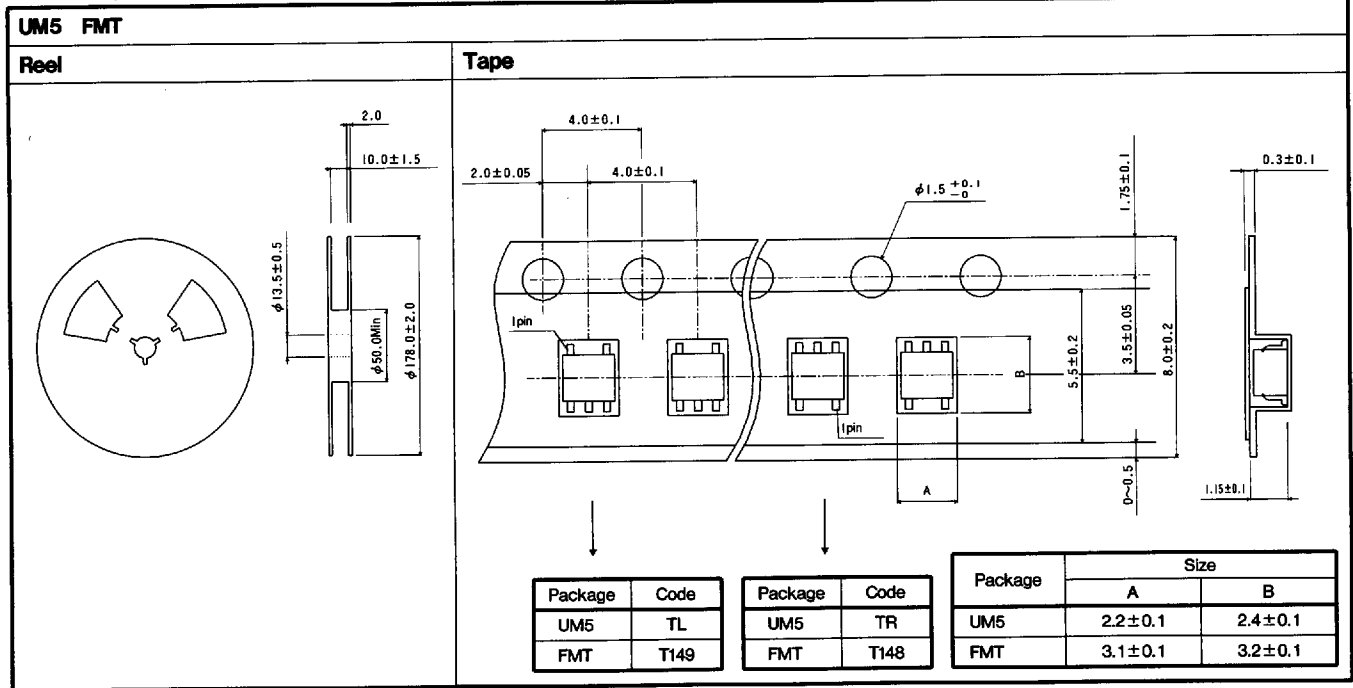
■ UM5 · FMT

● Packing

| Package | Packaging type | Packaging condition | Direction | Code | Quantity /Package (pcs.) | Quantity /Unit (pcs.) |
|---------|----------------|---------------------|------------------------------|------|--------------------------|-----------------------|
| UM5 | Taping | Embossed reel tape | 2-pin side on feed hole side | TL | 3000 | - |
| | | | 3-pin side on feed hole side | TR | | |
| FMT | Taping | Embossed reel tape | 3-pin side on feed hole side | T148 | 3000 | - |
| | | | 2-pin side on feed hole side | T149 | | |

● Package Specifications

(Unit : mm)



● For Standard products and Semi-standard products see page from 76 to 78.

● For marking see page From 79 to 81.