

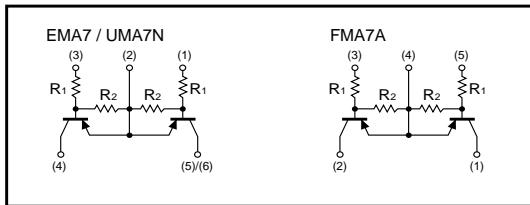
Emitter common (dual digital transistors)

EMA7 / UMA7N / FMA7A

●Features

1) Two DTA143X chips in a EMT or UMT or SMT package.

●Equivalent circuit



●Package, marking, and packaging specifications

| Type | EMA7 | UMA7N | FMA7A |
|------------------------------|------|-------|-------|
| Package | EMT5 | UMT5 | SMT5 |
| Marking | A7 | A7 | A7 |
| Code | T2R | TR | T148 |
| Basic ordering unit (pieces) | 8000 | 3000 | 3000 |

●Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|----------------------|------------------|------------|-------|
| Supply voltage | V _{CC} | -50 | V |
| Input voltage | V _{IN} | -20 | V |
| | | 7 | |
| Output current | I _O | -100 | mA |
| Power dissipation | P _d | 150(TOTAL) | mW *1 |
| | | 300(TOTAL) | |
| Junction temperature | T _J | 150 | °C |
| Storage temperature | T _{stg} | -55~+150 | °C |

*1 120mW per element must not be exceeded.
*2 200mW per element must not be exceeded.

●Electrical characteristics (Ta = 25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|----------------------|--------------------------------|------|------|------|------|--|
| Input voltage | V _{I (off)} | - | - | -0.3 | V | V _{CC} =-5V, I _O =-100μA |
| | V _{I (on)} | -2.5 | - | - | | V _O =-0.3V, I _O =-20mA |
| Output voltage | V _{O (on)} | - | -0.1 | -0.3 | V | I _O /I _I =-10mA/-0.5mA |
| Input current | I _I | - | - | -1.8 | mA | V _I =-5V |
| Output current | I _{O (off)} | - | - | -0.5 | μA | V _{CC} =-50V, V _I =0V |
| DC current gain | G _i | 30 | - | - | - | V _O =-5V, I _O =-10mA |
| Transition frequency | f _r | - | 250 | - | MHz | V _{CE} =-10V, I _E =5mA, f=100MHz * |
| Input resistance | R _i | 3.29 | 4.7 | 6.11 | kΩ | - |
| Resistance ratio | R ₂ /R ₁ | 1.7 | 2.1 | 2.6 | - | - |

*Transition frequency of the device.

●External dimensions (Units : mm)

