



PUMX1

DUAL TRANSISTOR

NPN GENERAL PURPOSE DUAL TRANSISTOR

DESCRIPTION

Two independently operating NPN transistors.

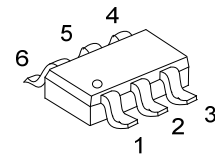
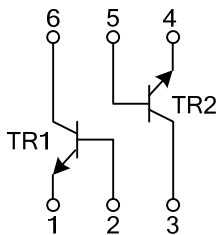
FEATURES

- * Low current (max.100mA)
- * Low voltage (max.40V)
- * Reduces number of components and board space.
- * Complement to PUMT1.

APPLICATIONS

- * General purpose switching and amplification.

SYMBOL



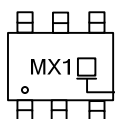
SOT-363

ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | | | | Packing |
|-----------------|--------------|---------|----------------|----|----|----|----|----|-----------|
| Lead Free | Halogen-Free | | 1 | 2 | 3 | 4 | 5 | 6 | |
| PUMX1L-AL6-R | PUMX1G-AL6-R | SOT-363 | E1 | B1 | C2 | E2 | B2 | C1 | Tape Reel |

| | |
|--|--|
| <p>PUMX1L-AL6-R</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p> | <p>(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free, L: Lead Free Plating, Blank: Pb/Sn</p> |
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MARKING



L: Lead Free
G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNIT |
|-----------------------------|-----------|----------|--------------------|
| Collector-Base Voltage | V_{CBO} | 50 | V |
| Collector-Emitter Voltage | V_{CEO} | 40 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current (DC) | I_C | 100 | mA |
| Peak Collector Current | I_{CM} | 200 | mA |
| Peak Base Current | I_{BM} | 200 | mA |
| Collector Power Dissipation | P_C | 200 | mW |
| Junction Temperature | T_J | 150 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55~+150 | $^{\circ}\text{C}$ |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---------------|--|-----|-----|-----|------|
| Collector-Emitter Saturation Voltage (Note) | $V_{CE(SAT)}$ | $I_C=50\text{mA}$, $I_B=5\text{mA}$ | | | 200 | mV |
| Collector Cutoff Current | I_{CBO} | $I_E=0$, $V_{CB}=30\text{V}$ | | | 100 | nA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=4\text{V}$, $I_C=0$ | | | 100 | nA |
| DC Current Transfer Ratio | h_{FE} | $I_C=1\text{mA}$, $V_{CE}=6\text{V}$ | 120 | | | |
| Transition Frequency | f_T | $I_C=2\text{mA}$, $V_{CE}=12\text{V}$, $f=100\text{MHz}$ | 100 | | | MHz |
| Collector capacitance | C_C | $I_E=I_C=0$, $V_{CB}=12\text{V}$, $f=1\text{MHz}$ | | | 1.5 | pF |

Note: Pulse test: $t_p \leq 300\mu\text{s}$, $\delta \leq 0.02$

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