

# MC2840

FOR GENERAL SWITCHING APPLICATION  
SILICON EPITAXIAL TYPE(SERIES TYPE)

## DESCRIPTION

MC2840 is a super mini package plastic seal type silicon epitaxial type double diode, especially designed for general switching application.

Double and small pin capacitance(2pieces), suitable for protect circuit, bias circuit.

## FEATURE

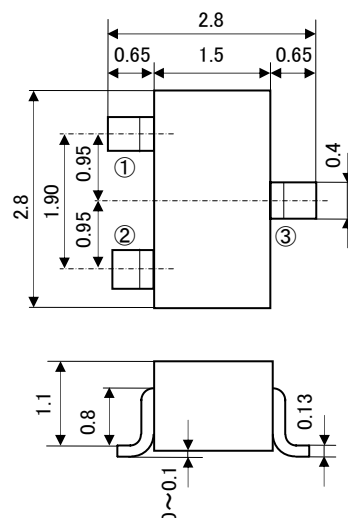
- Small pin capacitance
- Double and super mini package for mounting

## APPLICATION

For general switching of audio machine, VTR.

## OUTLINE DRAWING

Unit: mm



JEITA: SC-59

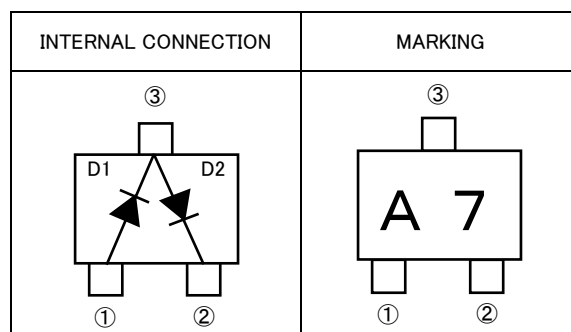
JEDEC: Similar to TO-236

TERMINAL CONNECTER

- ①: ANODE1
- ②: CATHODE2
- ③: CATHODE1+ANODE2

## MAXIMUM RATINGS (Ta=25°C)

| Symbol    | Parameter                     | Ratings    | Unit |
|-----------|-------------------------------|------------|------|
| $V_{RM}$  | Peak reverse voltage          | 35         | V    |
| $V_R$     | DC reverse voltage            | 30         | V    |
| $I_{FSM}$ | Surge current(1 $\mu$ s)      | 4          | A    |
| $I_{FM}$  | Peak forward current          | 300        | mA   |
| $I_O$     | Average rectification current | 100        | mA   |
| $P_T$     | Total allowance dissipation   | 200        | mW   |
| $T_j$     | Junction temperature          | +150       | °C   |
| $T_{stg}$ | Storage temperature           | -55 ~ +150 | °C   |



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

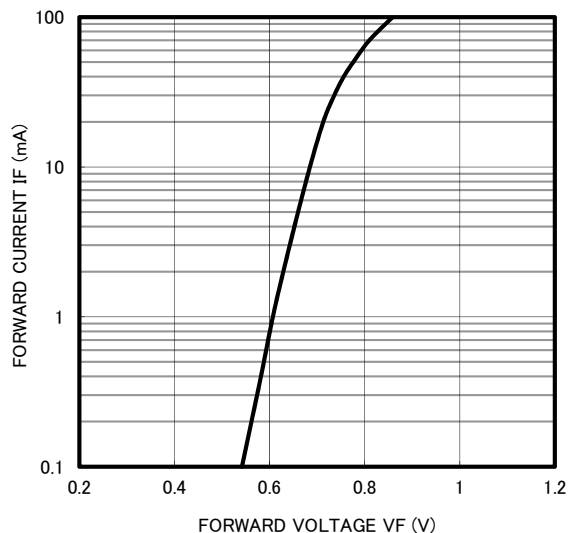
| Parameter       | Symbol   | Test conditions  | Limits |      |     | Unit    |
|-----------------|----------|------------------|--------|------|-----|---------|
|                 |          |                  | Min    | Typ  | Max |         |
| Forward voltage | $V_{F1}$ | $I_F=1mA$        | -      | 0.75 | 1.0 | V       |
|                 | $V_{F2}$ | $I_F=50mA$       | -      | 0.85 | 1.2 |         |
|                 | $V_{F3}$ | $I_F=100mA$      | -      | 0.90 | 1.4 |         |
| Reverse current | $I_{R1}$ | $V_R=30V$        | -      | -    | 0.1 | $\mu A$ |
| Pin capacitance | $C_t$    | $V_R=0V, f=1MHz$ | D1     | -    | 6   | pF      |
|                 |          |                  | D2     | -    | 10  |         |

# MC2840

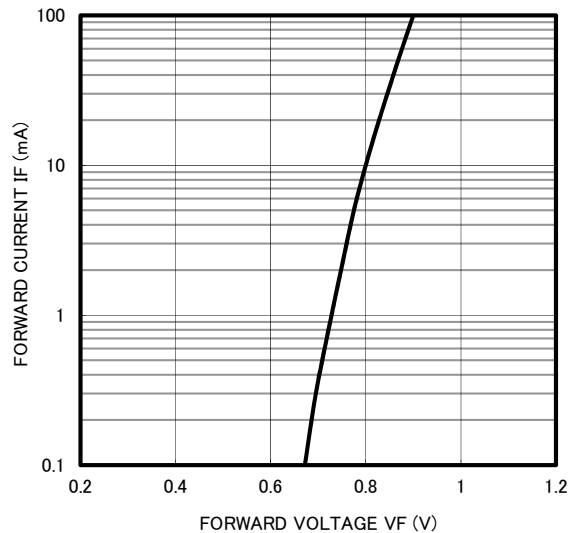
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SILICON EPITAXIAL TYPE(SERIES TYPE)

## TYPICAL CHARACTERISTICS (Ta=25°C)

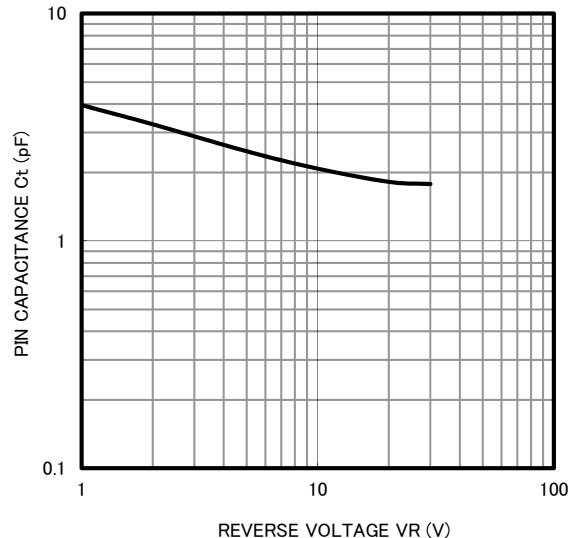
FORWARD CURRENT VS. FORWARD VOLTAGE(D1)



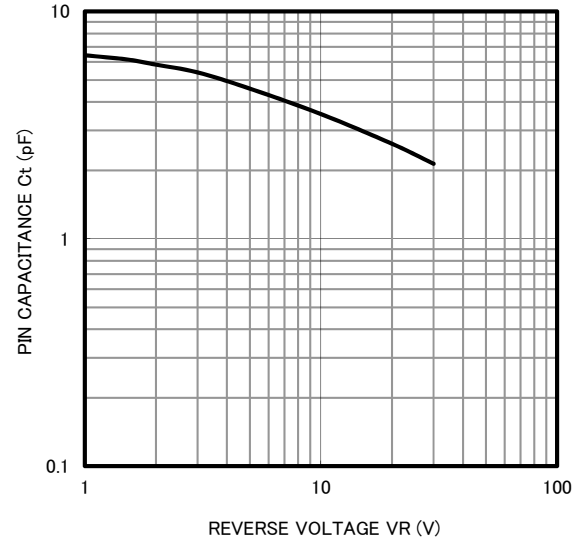
FORWARD CURRENT VS. FORWARD VOLTAGE(D2)



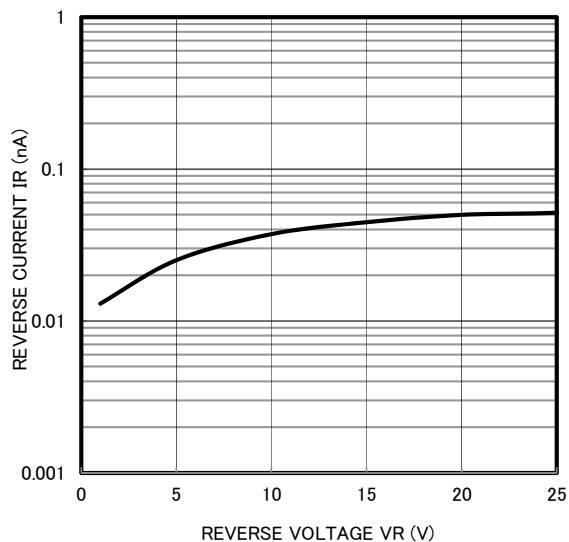
PIN CAPACITANCE VS. REVERSE VOLTAGE(D1)



PIN CAPACITANCE VS. REVERSE VOLTAGE(D2)



REVERSE CURRENT VS. FORWARD VOLTAGE





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