

MC2836

FOR HIGH SPEED SWITCHING APPLICATION
SILICON EPITAXIAL TYPE(COMMON ANODE)

DESCRIPTION

MC2836 is a super mini package plastic seal type silicon epitaxial type double diode, especially designed for high speed switching application.

Due to the small pin capacitance, short switching time (reverse recovery time), It is most suitable for high speed switching application and limiter, clipper application.

FEATURE

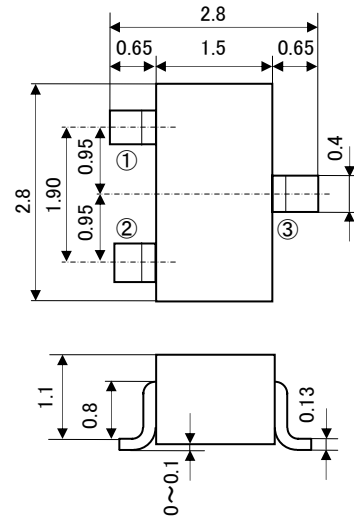
- Small pin capacitance
- Quick switching time
- High voltage
- Series connected two elements
- Good two element characteristics
- Double and super mini package for mounting

APPLICATION

For general high speed switching of audio machine, VTR.

OUTLINEDRAWING

Unit : mm



JEITA: SC-59

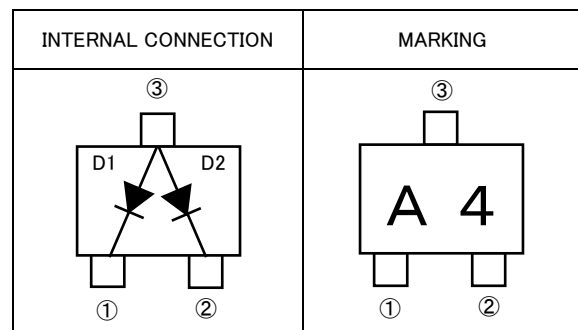
JEDEC: Similar to TO-236

TERMINAL CONNECTER

- ①: CATHODE 1
- ②: CATHODE 2
- ③: ANODE (COMMON)

MAXIMUM RATINGS (Ta=25°C)

| Symbol | Parameter | Ratings | Unit |
|-----------|-------------------------------|----------|------|
| V_{RM} | Peak reverse voltage | 75 | V |
| V_R | DC reverse voltage | 50 | V |
| I_{FSM} | Surge current (1 μ 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 |
| Tstg | Storage temperature | -55~+150 | °C |



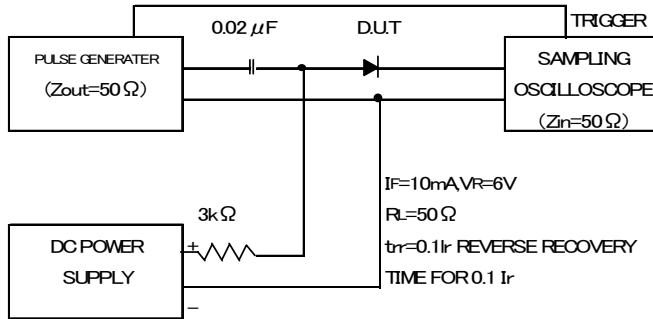
ELECTRICAL CHARACTERISTICS (Ta=25°C)

| Parameter | Symbol | Test conditions | Limits | | | Unit |
|-----------------------|----------|-------------------------|--------|------|-----|---------|
| | | | Min | Typ | Max | |
| Forward voltage | V_{F1} | $I_F=10mA$ | - | 0.77 | 0.9 | V |
| | V_{F2} | $I_F=50mA$ | - | 0.90 | 1.0 | |
| | V_{F3} | $I_F=100mA$ | - | 0.95 | 1.2 | |
| Reverse current | I_R | $V_R=50V$ | - | - | 0.1 | μ A |
| Pin capacitance | C_t | $V_R=0V, f=1MHz$ | - | 2.8 | 4.0 | pF |
| Reverse recovery time | trr | (Refer to test circuit) | - | - | 4.0 | ns |

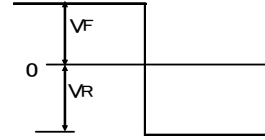
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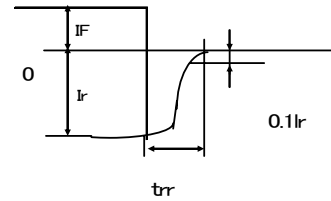
REVERSE RECOVERY TIME(t_{rr})TEST CIRCUIT



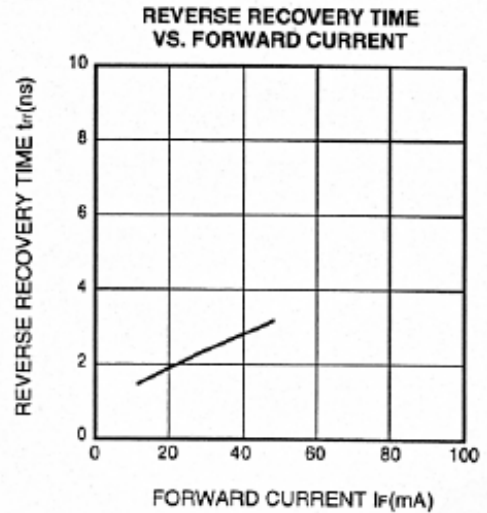
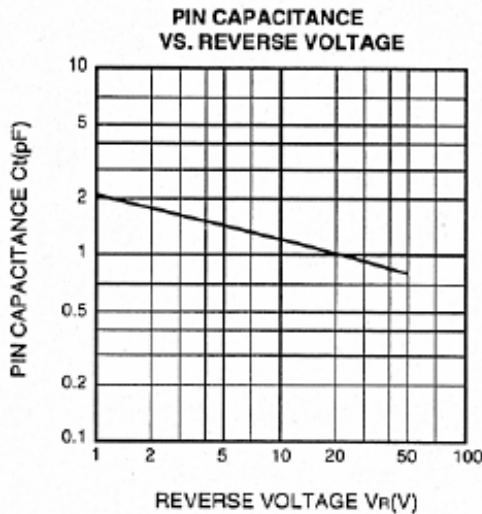
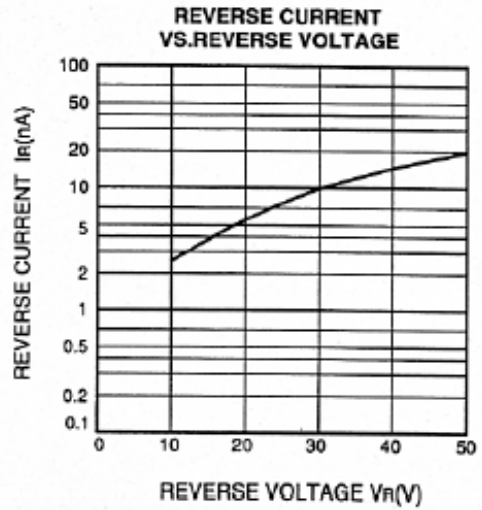
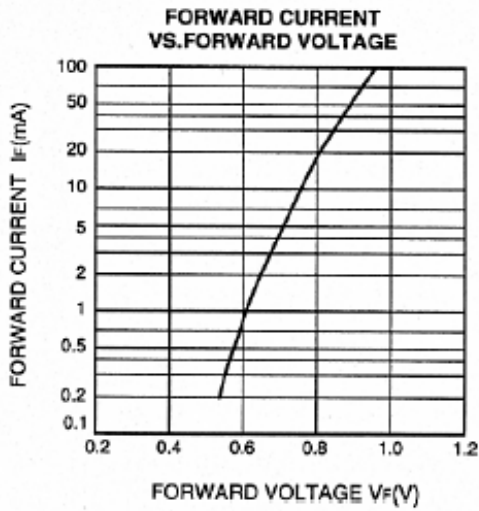
● INPUT VOLTAGE WAVE FORM



● CURRENT WAVE FORM IN DIODE



TYPICAL CHARACTERISTICS





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