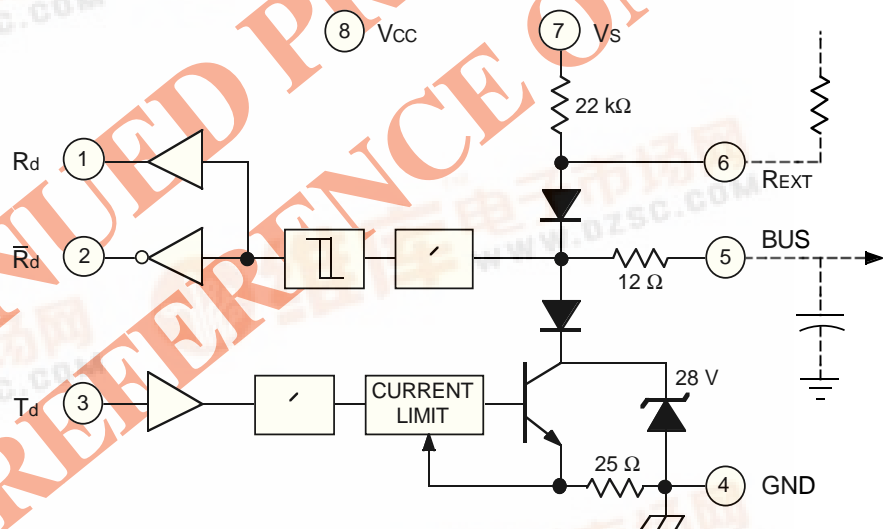


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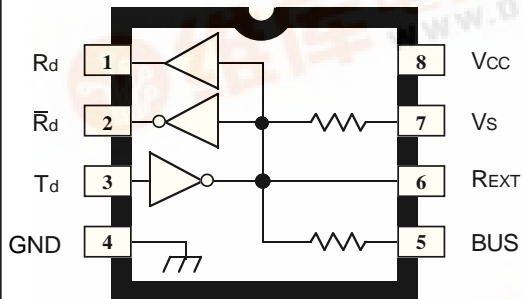
BUS DRIVER / RECEIVER

The ULQ2470L and ULQ2470M are bi-directional bus driver / receivers designed specifically for automotive applications. They are intended to be used as an interface between a microprocessor and a single-wire multiplex data bus operating from the A-line or battery. Each device consists of a wave-shaped open-collector driver, a pull-up resistor, and an input filter and buffer.

Output driver protection circuitry provides output shutdown if currents in excess of 25 to 30 mA occur. Additionally, over-voltage shutdown occurs when the bus voltage exceeds approximately 22 volts.

FUNCTIONAL BLOCK DIAGRAM

Dwg. FP-039

ULQ2470M

Dwg. PP-061

Note that the ULQ2470M (DIP) and the ULQ2470L (SOIC) are electrically identical and share a common terminal number assignment.

ABSOLUTE MAXIMUM RATINGS
at $T_A = 25^\circ\text{C}$

Bus Supply Voltage Range, (V_{BAT})	-13.5 V to 27 V
Logic Supply Voltage Range, (V_{CC})	-0.3 V to 9.0 V
Input Voltage Range, (V_{BUS})	-3.0 V to 24 V
Operating Temperature Range, T_A	-40°C to +85°C
Junction Temperature Range, T_J	-40°C to 150°C
Storage Temperature Range, T_S	-65°C to 150°C

FEATURES AND BENEFITS

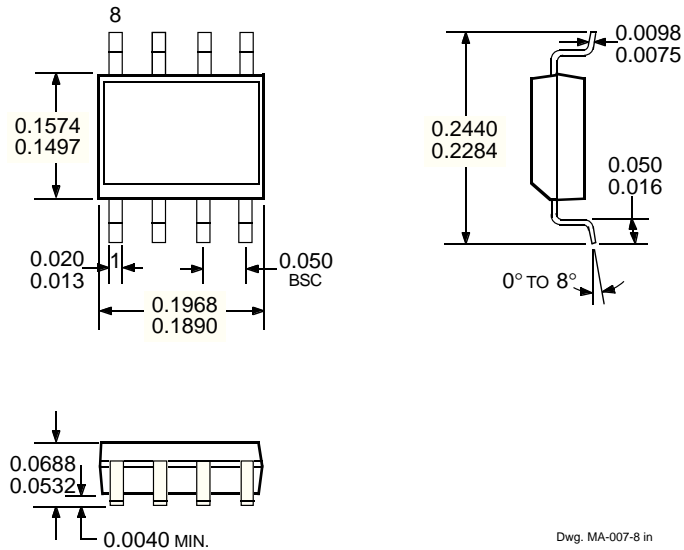
- Over-Voltage Protection
- Diode Isolation from both Ground and Supply
- Reverse-Battery Protection
- Low Supply Current
- High Noise Immunity
- Output Current Limiting
- Low Standby Current—24 mA Max.
- Open-Ground Protection
- Under-Voltage Lockout

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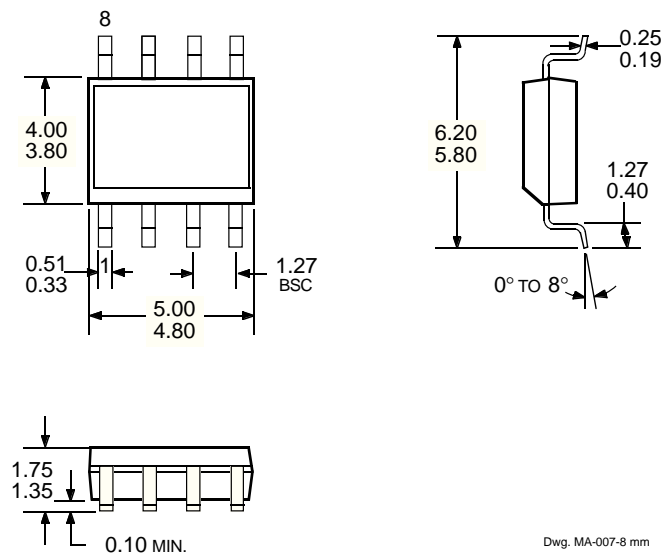
BUS DRIVER / RECEIVER

ULQ2470L

Dimensions in Inches
(for reference only)



Dimensions in Millimeters
(controlling dimensions)



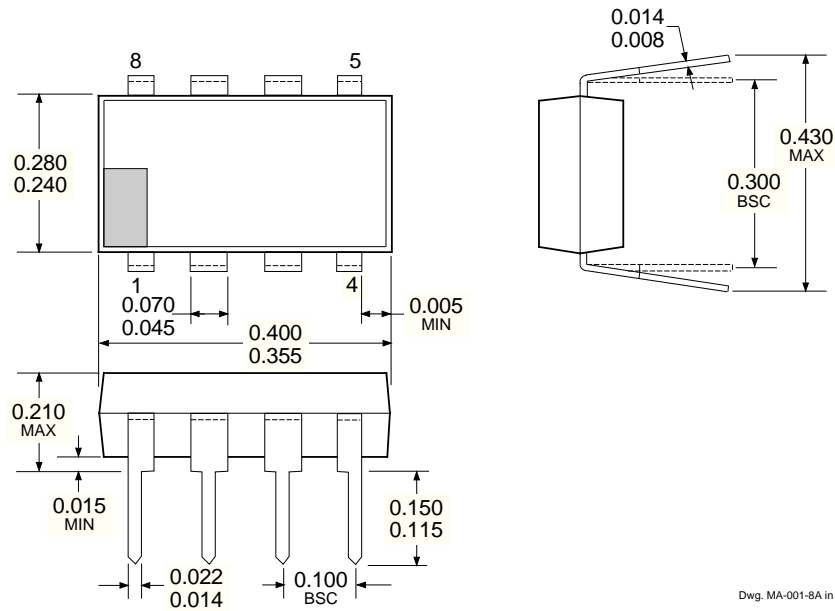
- NOTES: 1. Lead spacing tolerance is non-cumulative.
2. Exact body and lead configuration at vendor's option within limits shown.

2470

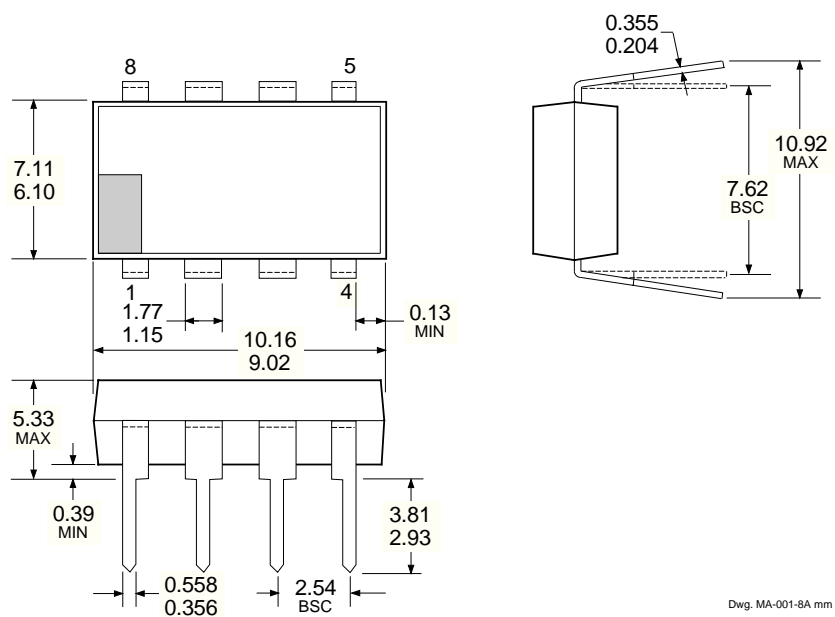
BUS DRIVER / RECEIVER

ULQ2470M

Dimensions in Inches
(controlling dimensions)



Dimensions in Millimeters
(for reference only)



- NOTES: 1. Leads 1, 4, 5, and 8 may be half leads at vendor's option.
2. Lead thickness is measured at seating plane or below.
3. Lead spacing tolerance is non-cumulative.
4. Exact body and lead configuration at vendor's option within limits shown.

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BUS DRIVER / RECEIVER

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