

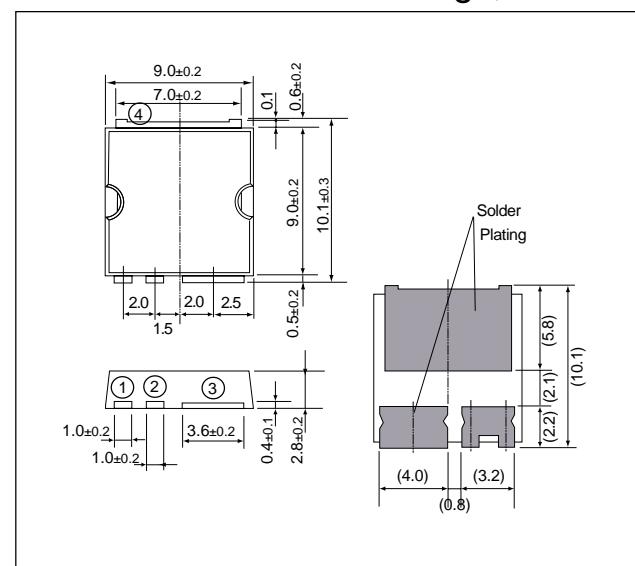
MS906C3 (20A) (300V / 20A)

Low loss fast recovery diode

■ Outline drawings, mm

■ Major characteristics

| Characteristics | MS906C3 | Units | Condition |
|------------------|---------|-------|----------------------------|
| V _{RRM} | 300 | V | |
| V _F | 0.89 | V | T _j =125°C, typ |
| I _O | 20 | A | |



■ Features

- Low V_F
- Low height : 2.8mm
- Small mounting area
- High reverse voltage
- Center tap connection

■ Applications

- High frequency operation
- DC-DC converters
- AC adapter

■ Maximum ratings and characteristics

● Absolute maximum ratings

| Item | Symbol | Conditions | Rating | Unit |
|---------------------------------------|------------------|---|-------------|------|
| Repetitive peak reverse voltage | V _{RRM} | | 300 | V |
| Repetitive peak surge reverse voltage | V _{RSM} | t _w =500ns, duty=1/40 | 300 | V |
| Average output current | I _O | Square wave, duty=1/2 T _c =95°C | 20 * | A |
| Surge current | I _{FSM} | Sine wave 10ms | 80 | A |
| Operating junction temperature | T _j | | +150 | °C |
| Storage temperature | T _{stg} | | -40 to +150 | °C |

* Average output current at centertap full wave connection

● Electrical characteristics (T_c=25°C Unless otherwise specified)

| Item | Symbol | Conditions | Max. | Unit |
|-----------------------|------------------|--|------|------|
| Forward voltage drop | V _{FM} | I _{FM} =10A | 1.2 | V |
| Reverse current | I _{RRM} | V _R =V _{RRM} | 200 | μA |
| Reverse recovery time | trr | I _F =0.1A, I _R =0.2A, I _{rec} =0.05A | 35 | ns |

● Electrical characteristics (T_c=25°C Unless otherwise specified)

| Item | Symbol | Condition | Max. | Unit |
|--------------------|----------------------|------------------|------|------|
| Thermal resistance | R _{th(j-c)} | Junction to case | 2 | °C/W |

■ Characteristics

