

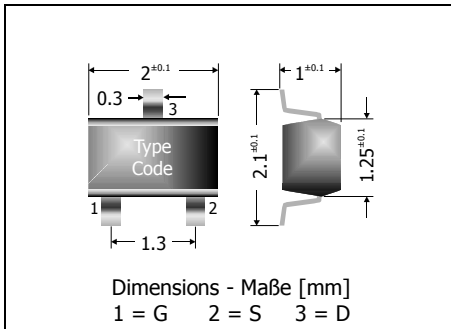
MMFTN3018W

N

Silicon N-Channel MOS Field Effect Transistor
Silizium N-Kanal MOS Feldeffekt-Transistor

N

Version 2011-01-28



Power dissipation – Verlustleistung

200 mW

Plastic case
Kunststoffgehäuse

SOT-323

Weight approx. – Gewicht ca.

0.01 g

Plastic material has UL classification 94V-0
Gehäusematerial UL94V-0 klassifiziertStandard packaging taped and reeled
Standard Lieferform getupet auf Rolle

Maximum ratings (T_A = 25°C)

Grenzwerte (T_A = 25°C)

| | | MMFTN3018W | |
|-------------------------------------------------------|---------|------------------|----------------------|
| Drain-Source-voltage – Drain-Source-Spannung | G short | V _{DSS} | 60 V |
| Gate-Source-voltage Continuous – Gate-Source-Spannung | | V _{GSS} | ± 20 V |
| Power dissipation – Verlustleistung | | P _{tot} | 200 mW ¹⁾ |
| Drain current continuous – Drainstrom (dc) | | I _D | 100 mA |
| Peak Drain current – Drain-Spitzenstrom | | I _{DM} | 400 mA |
| Junction temperature – Sperrschichttemperatur | | T _j | 150°C |
| Storage temperature – Lagerungstemperatur | | T _S | -55...+150°C |

1 Device mounted on standard PCB material
Bauteil montiert auf Standard-Leiterplattenmaterial

Characteristics (T_j = 25°C)**Kennwerte (T_j = 25°C)**

| | | Min. | Typ. | Max. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------|-------------|-------------|
| Drain-Source breakdown voltage – Drain-Source-Durchbruchspannung I _D = 10 μA | V _{(BR)DSS} | 30 V | | |
| Drain-Source leakage current – Drain-Source Leckstrom V _{DS} = 30 V | G short I _{DSS} | | | 1 μA |
| Gate-Source leakage current – Gate-Source Leckstrom V _{GS} = 20 V | ±I _{GSS} | | | 1 μA |
| Gate-Source threshold voltage – Gate-Source Schwellspannung V _{DS} = 3 V, I _D = 100 μA | V _{GS(th)} | 0.8 V | | 1.5 V |
| Drain-Source on-state resistance – Drain-Source Einschaltwiderstand V _{GS} = 4 V, I _D = 10 mA V _{GS} = 2.5 V, I _D = 1 mA | R _{DS(on)} R _{DS(on)} | | | 8 Ω 13 Ω |
| Forward Transfer Admittance – Übertragungssteilheit V _{DS} = 3 V, I _D = 10 mA | g _{FS} | 20 mS | | |
| Input Capacitance – Eingangskapazität V _{DS} = 5 V, f = 1 MHz | C _{iss} | | 13 pF | |
| Output Capacitance – Ausgangskapazität V _{DS} = 5 V, f = 1 MHz | C _{oss} | | 9 pF | |
| Reverse Transfer Capacitance – Rückwirkungskapazität V _{DS} = 5 V, f = 1 MHz | C _{rss} | | 4 pF | |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | R _{thA} | < 625 K/W ¹⁾ | | |

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