

MMBF170

N-Channel Enhancement Mode Field Effect Transistor

Product Overview

For complete documentation, see the data sheet.



This N-Channel enhancement mode field effect transistor is produced using ON Semiconductor's proprietary, high cell density, DMOS technology. This product has been designed to minimize on-state resistance while providing rugged, reliable, and fast switching performance. This can be used in most applications requiring up to 500mA DC. This product is particularly suited for low voltage, low current applications such as small servo motor control, power MOSFET gate drivers, and other switching applications.

Features

- High density cell design for low RDS(ON)
- Voltage controlled small signal switch
- Rugged and reliable
- High saturation current capability

Applications

- This product is general usage and suitable for many different applications.

| Part Electrical Specifications | | | | | | | | | | | | | | | | | |
|--------------------------------|-------------------|---|--------|------------------|---------------|-------------------------|--------------------|------------------------|---------------|---------------|---|---|--|----------------------------------|---------------------------------|--------------------|--------------|
| Product | Pricing (\$/Unit) | Compliance | Status | Channel Polarity | Configuration | $V_{DS}^{(BR)}$ Min (V) | V_{GS}^{Max} (V) | $V_{GS}^{(t)}$ Max (V) | I_D Max (A) | P_D Max (W) | $R_{DS(on)}^{Max}$ @ $V_{GS} = 2.5V$ (mΩ) | $R_{DS(on)}^{Max}$ @ $V_{GS} = 4.5V$ (mΩ) | $R_{DS(on)}^{Max}$ @ $V_{GS} = 10V$ (mΩ) | Q_g Typ @ $V_{GS} = 4.5V$ (nC) | Q_g Typ @ $V_{GS} = 10V$ (nC) | C_{iss} Typ (pF) | Package Type |
| MMBF170 | 0.0447 |   | Active | N-Channel | Single | 60 | ±20 | 3 | 0.5 | 0.3 | - | - | - | - | 0.65 | 24 | SOT-23-3 |