

BSS138

N-Channel Logic Level Enhancement Mode Field Effect Transistor, 50V, 220mA

Product Overview

For complete documentation, see the data sheet.

This N-Channel enhancement mode MOSFET is produced using a proprietary, high cell density, DMOS technology. This product has been designed to minimize on-state resistance while providing rugged, reliable, and fast switching performance. The BSS138 is particularly suited for low voltage, low current applications such as small servo motor control, power MOSFET gate drivers, and other switching applications.


Features

- 0.22 A, 50 V. $R_{DS(ON)} = 3.5 \text{ } @ \text{ } V_{GS} = 10 \text{ V}$. $R_{DS(ON)} = 6.0 \text{ } @ \text{ } V_{GS} = 4.5 \text{ V}$
- High density cell design for extremely low $R_{DS(ON)}$.
- Rugged and Reliable.
- Compact industry standard SOT-23 surface mount package.

Applications

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

Part Electrical Specifications

Product	Status	Compliance	Channel Polarity	Configuration	$V_{DS(ON)}^{(BR)}$ Min (V)	$V_{GS}^{(ON)}$ Max (V)	$V_{GS(th)}$ Max (V)	I_D Max (A)	P_D Max (W)	$R_{DS(on)}$ Max @ $V_{GS} = 2.5 \text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 4.5 \text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 10 \text{ V}$ (mΩ)	Q_g Typ @ $V_{GS} = 4.5 \text{ V}$ (nC)	Q_g Typ @ $V_{GS} = 10 \text{ V}$ (nC)	C_{iss} Typ (pF)	Package Type
BSS138	Active		N-Channel	Single	50.0	-	1.5	0.22	0.36	-	600 0.0	350 0.0	-	1.0	27.0	SOT-23-3
BSS138-T	Obsolete		N-Channel	-	50.0	-	1.5	0.22	0.36	-	600 0.0	350 0.0	-	-	27.0	SOT-23-3