|  |
| --- |
| **New original Integrated Circuits STD10NM60N** |
| **Boyad part number** | 497-10021-2-ND - Tape and Reel (TR)497-10021-1-ND - Shear Tape (CT)497-10021-6-ND - Digi-Reel® Custom Reel |  |
| **manufacturer** | **[STMicroelectronics](https://www.digikey.cn/zh/supplier-centers/stmicroelectronics%22%20%5Ct%20%22https%3A//www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |  |
| **Manufacturer product number** | STD10NM60N |  |
| **description** | MOSFET N-CH 600V 10A DPAK |  |
| **Original standard delivery time** | 52 weeks |
| **Detailed description** | Surface mount N-channel 600 V 10A(Tc) 70W(Tc) DPAK |  |
| **Customer internal part number** |  |
| **Specifications** | **[Specifications](https://www.st.com/resource/en/datasheet/std10nm60n.pdf%22%20%5Ct%20%22https%3A//www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |

**Product attributes**

|  |  |  |
| --- | --- | --- |
| **TYPE** | **DESCRIPTION** | **CHOOSE** |
| **category** | **[Discrete semiconductor products](https://www.digikey.cn/zh/products/category/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/19)****[Transistors - FETs, MOSFETs - single](https://www.digikey.cn/zh/products/filter/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/278)** |  |
| **manufacturer** | **[STMicroelectronics](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/stmicroelectronics/278?s=N4IgjCBcoLQdIDGUBmBDANgZwKYBoQA3AOygBcAnAV3xAHsoBtEAFgE4B2EAXQIAcyUEAGVKAS2IBzEAF85QA)** |  |
| **series** | **[MDmesh™ II](https://www.digikey.cn/zh/products/result?s=N4IgjCBcoLQCxVAYygMwIYBsDOBTANCAG4B2aWehA9lANogDMADAwBwIC6hADgC5QgQAXxFA)** |  |
| **wrap** | Tape and Reel (TR)Shear band (CT)Digi-Reel custom tape and reel® |  |
| **Product status** | Sale |  |
| **FET type** | **[N-channel](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/n-%E9%80%9A%E9%81%93/278?s=N4IgjCBcoGwAwyqAxlAZgQwDYGcCmANCAG4B2UALgE4CuhIA9lANogDMA7ABwCcfIAXSIAHClBABlagEtSAcxABfZUA)** |  |
| **technology** | MOSFETs (metal oxides) |  |
| **Drain-to-source voltage (Vdss)** | **[600 V](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/600-v/278?s=N4IgjCBcoEwAwDYAcVQGMoDMCGAbAzgKYA0IAbgHZQAuATgK4kgD2UA2iAnHAAQBqIALqkADtSggAqhQCW1APKYAsoWz56tQiAC+uoA)** |  |
| **Current at 25°C - Continuous Drain (ID)** | **[10A（Tc）](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/10a-tc/278?s=N4IgjCBcoGwAwA4qgMZQGYEMA2BnApgDQgBuAdlAC4BOArkSAPZQDaIA7AEwCsiIAusQAOlKCADKNAJZkA5iAC+SoA)** |  |
| **Drive voltage (max. rds on, min. rds on)** | 10V |  |
| **On-resistance (max) with different IDs, Vgs** | 550 mOhms @ 4A, 10V |  |
| **Vgs(th) at different IDs (maximum)** | 4V @ 250µA |  |
| **Gate charge (Qg) at different Vgs (max)** | 19 nC @ 10 V |  |
| **Vgs (max)** | ±25V |  |
| **Input capacitance (CISS) at different VDS (max)** | 540 pF @ 50 V |  |
| **FET function** | - |  |
| **Power Dissipation (Max)** | 70W（Tc） |  |
| **Operating temperature** | -55°C ~ 150°C（TJ） |  |
| **Installation type** | **[Surface mount type](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/%E8%A1%A8%E9%9D%A2%E8%B4%B4%E8%A3%85%E5%9E%8B/278?s=N4IgjCBcoGwJxVAYygMwIYBsDOBTANCAG4B2UALgE4CuBIA9lANogAsADHAMzcgC6hAA7koIAMpUAliQDmIAL6KgA)** |  |
| **Vendor device packaging** | DPAK |  |
| **Package/Case** | **[TO-252-3, DPak (2-lead + lusk), SC-63](https://www.digikey.cn/zh/products/filter/%E5%88%86%E7%AB%8B%E5%8D%8A%E5%AF%BC%E4%BD%93%E4%BA%A7%E5%93%81/%E6%99%B6%E4%BD%93%E7%AE%A1-fet-mosfet-%E5%8D%95%E4%B8%AA/to-252-3-dpak-2-%E5%BC%95%E7%BA%BF-%E6%8E%A5%E7%89%87-sc-63/278?s=N4IgjCBcpgbFoDGUBmBDANgZwKYBoQA3AOygBcAnAV3xAHsoBtEAFjAGY2AmEAXQIAOZKCADKlAJbEA5iAC+CoA)** |  |
| **Base product number** | **[STD10](https://www.digikey.cn/zh/products/base-product/stmicroelectronics/497/STD10/122250)** |  |

Report a product information error

Create a new parametric search

**Documents & Media**

|  |  |
| --- | --- |
| **RESOURCE TYPE** | **LINK** |
| **Specifications** | **[STx10NM60N](https://www.st.com/resource/en/datasheet/std10nm60n.pdf%22%20%5Ct%20%22https%3A//www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |
| **Other related documentation** | **[STD10NM60N View All Specifications](https://www.st.com/en/power-transistors/std10nm60n.html%22%20%5Ct%20%22https%3A//www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |
| **Product training modules** | **[STMicroelectronics ST MOSFETs](https://www.digikey.cn/zh/ptm/s/stmicroelectronics/st-mosfets%22%20%5Ct%20%22https%3A//www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |
| **EDA model** | **[STD10NM60N by Ultra Librarian](https://app.ultralibrarian.com/details/FC432FC0-862F-11EA-8C00-0AD2C9526B44/STMicroelectronics/STD10NM60N?ref=digikey" \t "https://www.digikey.cn/zh/products/detail/stmicroelectronics/STD10NM60N/_blank)** |

**Environmental and export classification**

|  |  |
| --- | --- |
| **ATTRIBUTE** | **DESCRIPTION** |
| **RoHS status** | ROHS3 compliant |
| **Moisture Sensitivity Level (MSL)** | 1 (unlimited) |
| **REACH status** | Non-REACH products |
| **ECCN** | EAR99 |
| **HTSUS** | 8541.29.0095 |