

SO-8 DEVICES (continued)



SOIC (MiniMOS™) Packages

MiniMOS devices are an advanced series of power MOSFETs which utilize Motorola's High Cell Density HDTMOS process. These miniature surface mount MOSFETs feature ultra low $R_{DS(on)}$ and true logic level performance.

MiniMOS devices are designed for use in low voltage, high speed switching applications where power efficiency is important. Typical applications are dc-dc converters and power management in portable and battery powered products such as computers, printers, cellular and cordless phones. They can also be used for low voltage motor controls in mass storage products such as disk drives and tape drives.

Multiple Chip Products in SOIC — N-Channel

$V_{(BR)DSS}$ (V)	$R_{DS(on)}$ @ V_{GS}			I_D (A)	Motorola Part Number	$P_D^{(3)}$ (Watts) Max
	10 V (m Ω)	4.5 V (m Ω)	2.7 V (m Ω)			
50	200	180	—	1	<i>M MDF1N05E</i>	1.5
30	40	45	—	5	<i>M MSF5N03HD</i>	1.5
	70	90	—	2.8	<i>M MDF3N03HD</i>	1.5
	70/200 ⁽¹¹⁾	90/220	—	2	<i>M MDF2C03HD</i>	1.5
20	—	40	—	5	<i>M MSF5N02HD</i>	1.5
	85	90	—	3	<i>M MDF3N02HD</i>	1.5
	180	200	—	2	<i>M MDF2N02E</i>	1.5
	100/200 ⁽¹¹⁾	200/350 ⁽¹¹⁾	—	2	<i>M MDF2C02E</i>	1.5
12	—	—	45	6	<i>M MSF6N01HD</i>	1.5
	—	—	100	4	<i>M MDF4N01HD</i>	1.5
	—	—	100/200 ⁽¹¹⁾	2	<i>M MDF2C01HD</i>	1.5

Multiple Chip Products in SOIC — P-Channel

$V_{(BR)DSS}$ (V)	$R_{DS(on)}$ @ V_{GS}			I_D (A)	Motorola Part Number	$P_D^{(3)}$ (Watts) Max
	10 V (m Ω)	4.5 V (m Ω)	2.7 V (m Ω)			
30	200	220	—	2	<i>M MDF2P03HD</i>	1.5
20	90	95	—	3	<i>M MSF3P02HD</i>	1.5
	250	400	—	2	<i>M MDF2P02E</i>	1.5
12	—	80	90	4	<i>M MSF4P01HD</i>	1.5
	—	180	200	2	<i>M MDF2P01HD</i>	1.5

⁽³⁾ Power rating when mounted on an FR-4 glass epoxy printed circuit board with the minimum pad size recommended.

⁽¹¹⁾ N-Channel/P-Channel $R_{DS(on)}$

See Packaging Information under Technical Data Section for reel size, quantity and ordering information.

Devices listed in bold, italic are Motorola preferred devices.