



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
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SFF40N30M
SFF40N30Z

Electrical Characteristics @ T _J = 25°C (Unless Otherwise Specified)		Symbol	Min	Typ	Max	Units
Drain to Source Breakdown Voltage (V _{GS} =0 V, I _D =250 μA)		BV _{DSS}	300	—	—	Volts
Drain to Source On State Resistance (V _{GS} =10 V, I _D =50% Rated ID)		R _{DS(on)}	—	—	0.10	W
On State Drain Current (V _{DS} >I _{D(on)} X R _{DS(on)} Max, V _{GS} =10V)		I _{D(on)}	40	—	—	A
Gate Threshold Voltage (V _{DS} =V _{GS} , I _D = 4mA)		V _{GS(th)}	2.0	—	4.0	V
Forward Transconductance (V _{DS} >I _{D(on)} X R _{DS(on)} Max, I _{DS} = 50% Rated ID)		g _{fs}	15	25	—	mho
Zero Gate Voltage Drain Current (V _{DS} =max rated voltage, V _{GS} =0 V) (V _{DS} =80% rated V _{DS} , V _{GS} =0 V, T _A =125°C)		I _{DSS}	—	—	250 1000	mA
Gate to Source Leakage Forward	At rated V _{GS}	I _{GSS}	—	—	+100	nA
Gate to Source Leakage Reverse			—	—	-100	
Total Gate Charge	V _{GS} =10 Volts 50% rated V _{DS} 50% Rated ID	Q _g	—	177	200	nC
Gate to Source Charge		Q _{gs}	—	28	50	
Gate to Drain Charge		Q _{gd}	—	78	105	
Turn on Delay Time	V _{DD} =50% Rated V _{DS} 50% Rated ID R _G = 2.0Ω V _{GS} =10 Volts	t _{d(on)}	—	30	50	nsec
Rise Time		t _r	—	60	90	
Turn on Delay Time		t _{d(off)}	—	175	250	
Fall Time		t _f	—	45	90	
Diode Forward Voltage (I _S = Rated I _D , V _{GS} =0 V, T _J =25°C)		V _{SD}	—	—	1.5	V
Diode Reverse Recovery Time	T _J =25°C I _F =10A Di/dt=100A/μsec	t _{rr}	—	—	325	nsec
Reverse Recovery Charge		Q _{RR}	—	—	—	nC
Input Capacitance	V _{GS} =0 Volts V _{DS} =25 Volts f=1 MHz	C _{iss}	—	4800	—	pF
Input Capacitance		C _{oss}	—	745	—	
Reverse Transfer Capacitance		C _{rss}	—	283	—	

For thermal derating curves and other characteristics please contact SSDI Marketing Department.

Available Part Numbers:

SFF40N30M; SFF40N30MDB; SFF40N30MUB;
SFF40N30Z; SFF40N30ZDB; SFF40N0ZUB;

PIN ASSIGNMENT (Standard)

Package	Drain	Source	Gate
TO-254 (M)	Pin 1	Pin 2	Pin 3
TO-254Z (Z)	Pin 1	Pin 2	Pin 3

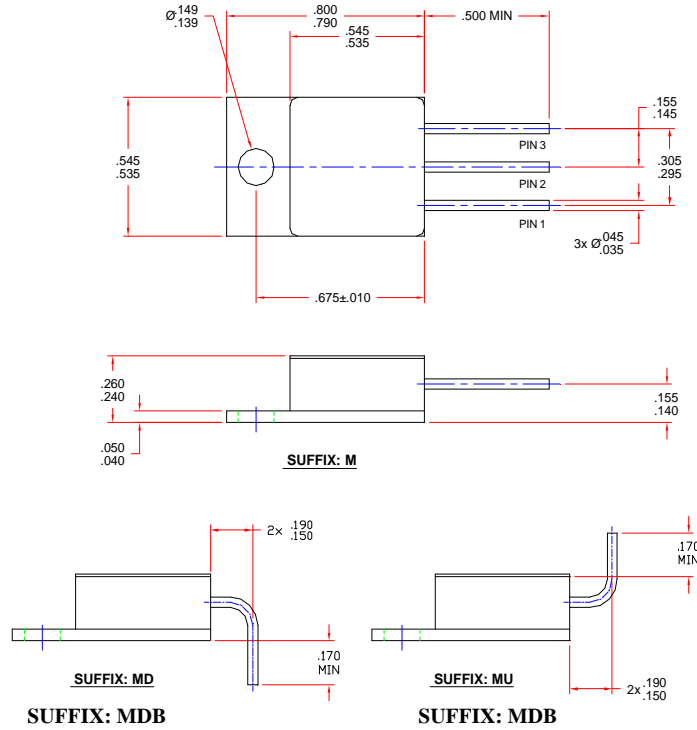


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SFF40N30M
SFF40N30Z

Case Outline: TO-254 (M)



Case Outline: TO-254Z (Z)

