

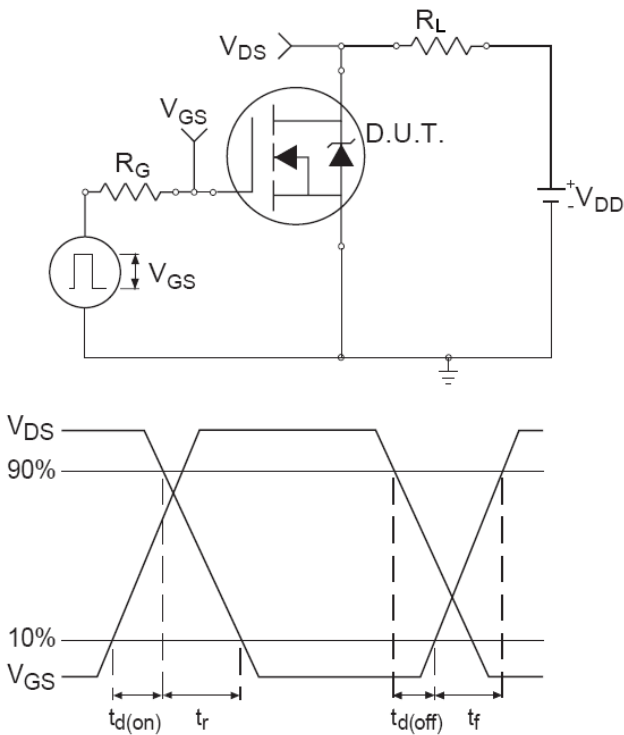
Features

- $V_{DS}=60V / V_{GS}=\pm 25V / I_D=180A$
 $R_{DS(ON)}=5m\Omega(max.)@V_{GS}=10V$
- Low Dense Cell Design
- Reliable and Rugged
- Advanced trench process technology

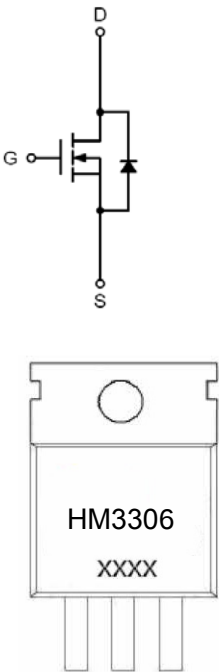
Applications

- Synchronous Rectification
- Power Management in Inverter System

Switching Time Test Circuit and Waveforms



Pin Description



Marking and pin Assignment



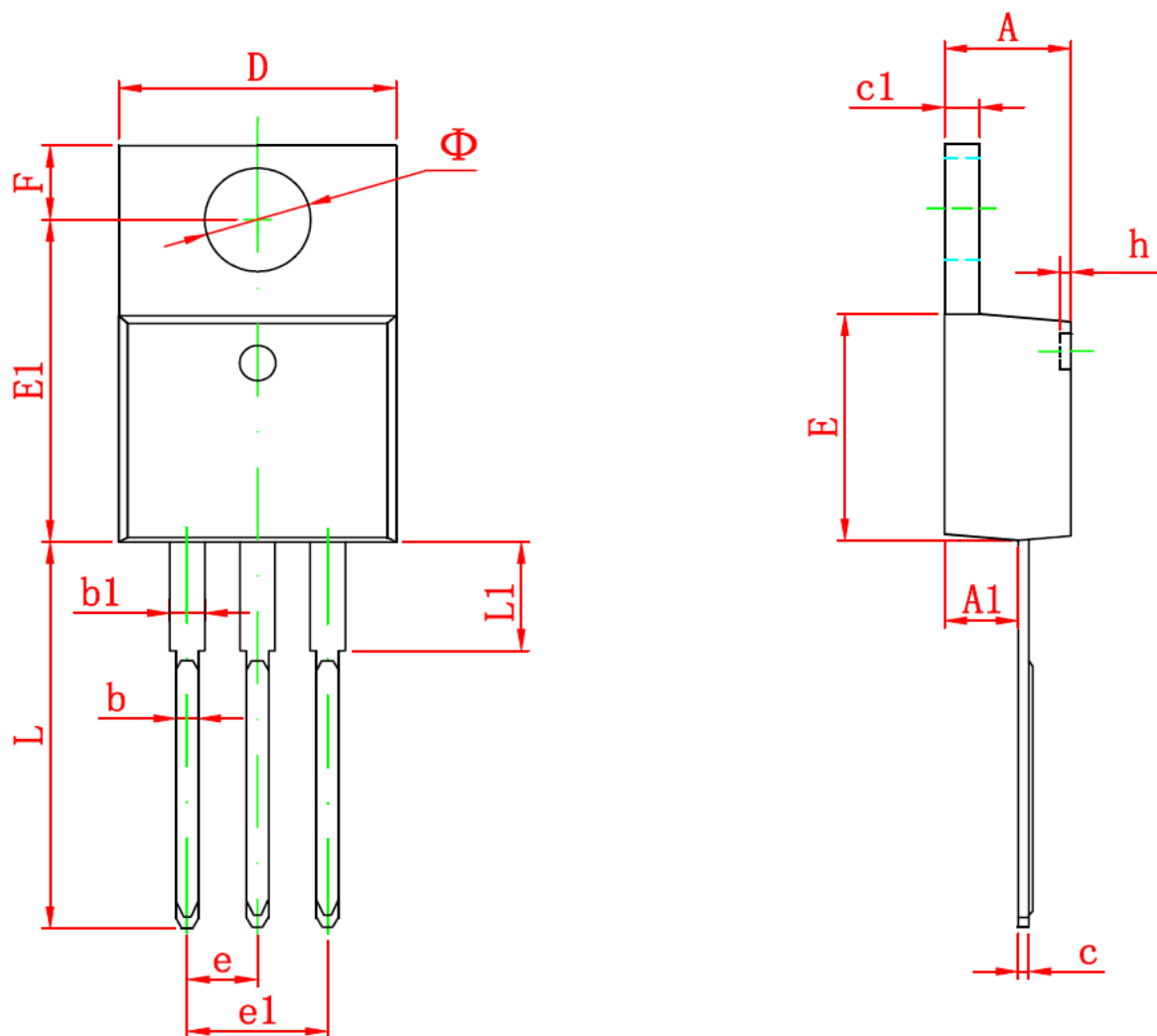
Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity
HM3306	HM3306	TO-220-3L	-	-	-

Electrical Characteristics of CP Test (TA=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Min.	Typ	Max.	Unit
Static Characteristics						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V, I _D =250uA	60			V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =48V, V _{GS} =0V			1	uA
		T _J =85°C			30	
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _D =250uA	2	2.8	4	V
I _{GSS}	Gate Leakage Current	V _{GS} =±25V, V _{DS} =0V			±100	nA
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V, I _D =40A		3.5	5	mΩ
V _{SD}	Diode Forward Voltage	I _{SD} =30A, V _{GS} =0V			1.3	V
R _G	Gate Resistance	V _{GS} =0V, V _{DS} =0V, Frequency=1MHz		1.7		Ω

TO-220-3L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155