

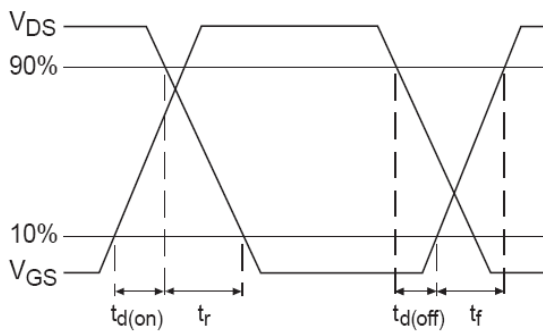
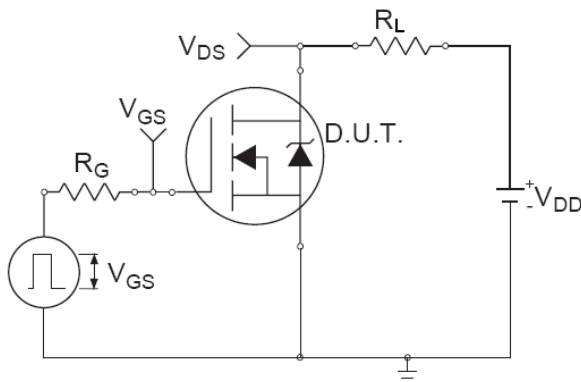
### Features

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

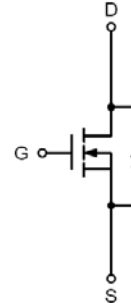
### Applications

- Synchronous Rectification
- Power Management in Inverter System

### Switching Time Test Circuit and Waveforms



### Pin Description



Marking and pin Assignment



TO-220-3L top view

### Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity
HM330I	HM330I	TO-220-3L	-	-	-

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

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

