

HM85P03K

-30V_{DS}/±25V_{GS}/85A(I_D) P-Channel Enhancement Mode MOSFET

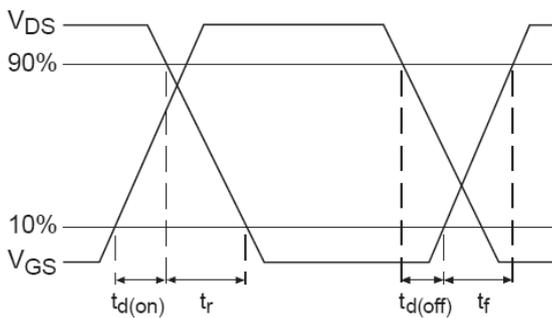
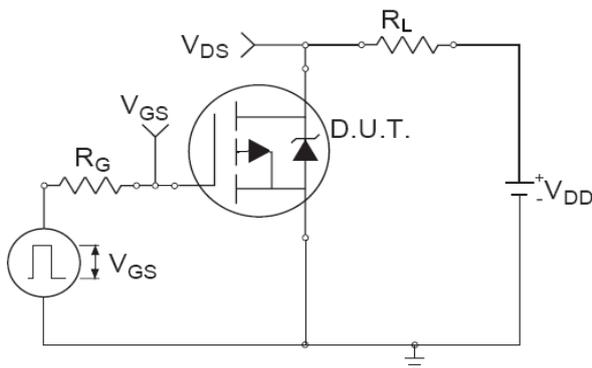
Features

- $V_{DS} = -30V / V_{GS} = \pm 25V / I_D = 85A$
 $R_{DS(ON)} < 6m\Omega(\text{max.}) @ V_{GS} = -20V$
 $R_{DS(ON)} < 7.6m\Omega(\text{max.}) @ V_{GS} = -10V$
- Low Dense Cell Design
- Reliable and Rugged
- Advanced trench process technology

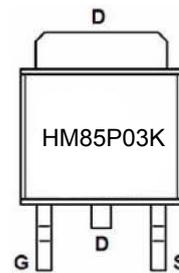
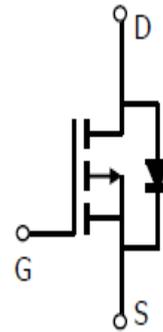
Applications

- . Synchronous Rectification
- . Power, Management in Inverter System

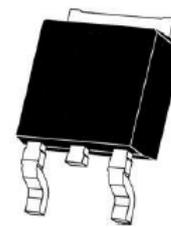
Switching Time Test Circuit and Waveforms



Pin Description



Marking and pin Assignment



TO-252-2L top view

Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity
HM85P03K	HM85P03K	TO-252-2L	-	-	-

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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	-30			V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =-24V, V _{GS} =0V			1	uA
		T _J =85°C			10	
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _D =-250uA	0.45	0.65	1.5	V
I _{GSS}	Gate Leakage Current	V _{GS} =±25V, V _{DS} =0V			±100	nA
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =-20V, I _D =20A			6	mΩ
		V _{GS} =-10V, I _D =15A			7.6	
		V _{GS} =-4.5V, I _D =10A			12	
V _{SD}	Diode Forward Voltage	I _{SD} =15A, V _{GS} =0V		0.75	1.1	V
R _G	Gate Resistance	V _{GS} =0V, V _{DS} =0V, Frequency=1MHz			3	Ω

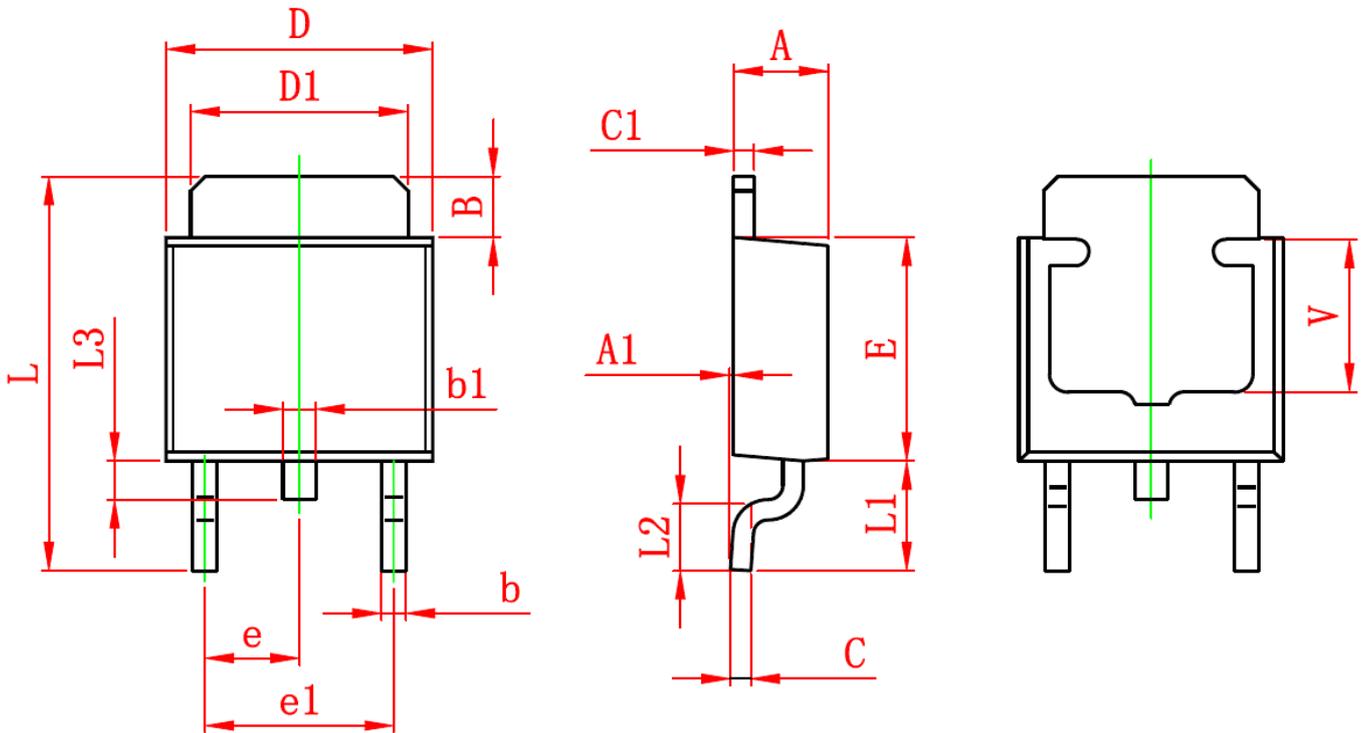
Note: 1: Pulse test ; pulse width ≤ 300ns, duty cycle ≤ 2%.

2: Guaranteed by design, not subject to production testing.

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TO-252-2L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP.		0.091 TYP.	
e1	4.500	4.700	0.177	0.185
L	9.500	9.900	0.374	0.390
L1	2.550	2.900	0.100	0.114
L2	1.400	1.780	0.055	0.070
L3	0.600	0.900	0.024	0.035
V	3.800 REF.		0.150 REF.	

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