P-Channel Enhancement Mode MOSFET

Feature

- -30V/-131A
  $R_{DS(ON)}$= 4.1 mΩ(typ.) @VGS = -10V
  $R_{DS(ON)}$= 6.4 mΩ(typ.) @VGS = -4.5V
- 100% Avalanche Tested
- 100% DVDS
- Reliable and Rugged
- Halogen Free and Green Devices Available
  (RoHS Compliant)

Pin Description

TO-220FB-3L TO-263-2L

Applications

- Switching application
- Li-battery protection
- DC-DC

Single P-Channel MOSFET

Ordering and Marking Information

P B HYG045P03 HYG045P03 XYMXXXXXX XYMXXXXXX	Package Code P: TO-220FB-3L B: TO-263-2L Date Code XYMXXXXXX

Note: HUAYI halogen free products contain molding compounds/die attach materials and 100% matte tin plate Termi-Nation finish;which are fully compliant with RoHS. HUAYI halogen free products meet or exceed the halogen free require-ments of IPC/JEDEC J-STD-020 for MSL classification at halogen free peak reflow temperature. HUAYI defines “Green” to mean halogen free (RoHS compliant) and halogen free (Br or Cl does not exceed 900ppm by weight in homogeneous material and total of Br and Cl does not exceed 1500ppm by weight).

HUAYI reserves the right to make changes, corrections, enhancements, modifications, and improvements to this pr-oduct and/or to this document at any time without notice.

Electrical Characteristics (Cont.) (Tc =25°C Unless Otherwise Noted)

Symbol	Parameter	Test Conditions	HYG045P03LQ2	Unit

Typical Operating Characteristics(Cont.)

Figure 7: On-Resistance vs. Temperature

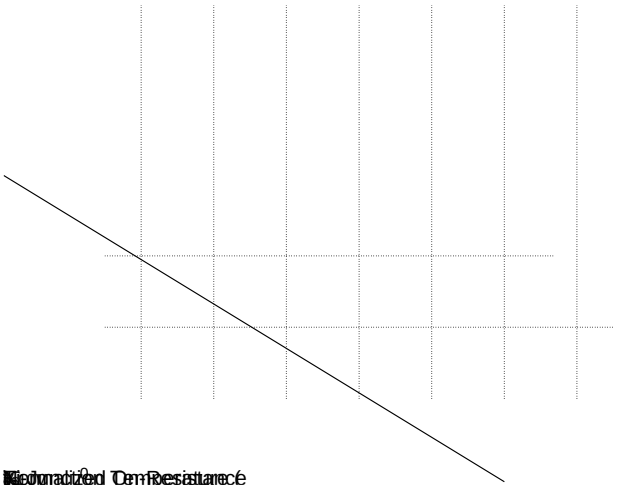


Figure 8: Source-Drain Diode Forward

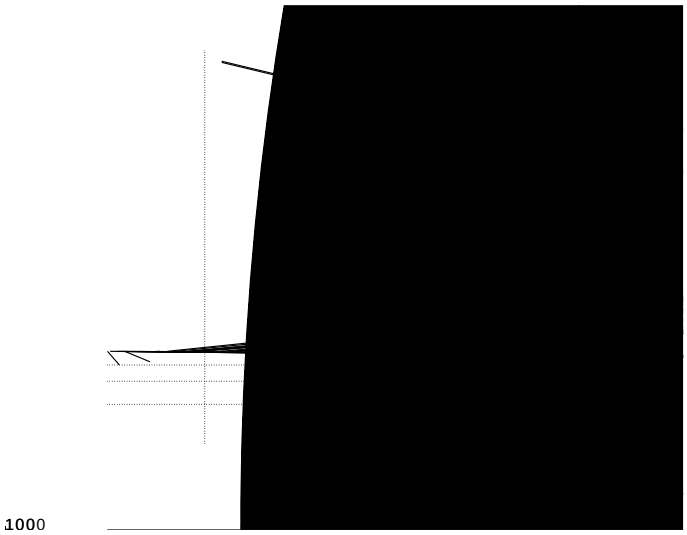


Figure 9: Capacitance Characteristics

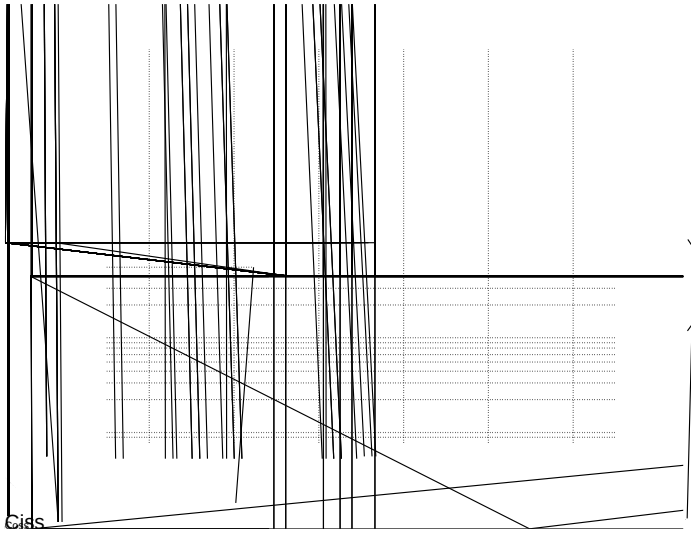
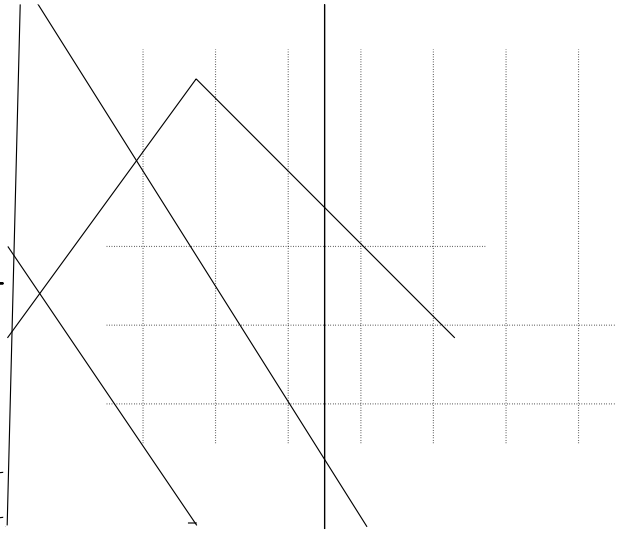


Figure 10: Gate Charge Characteristics



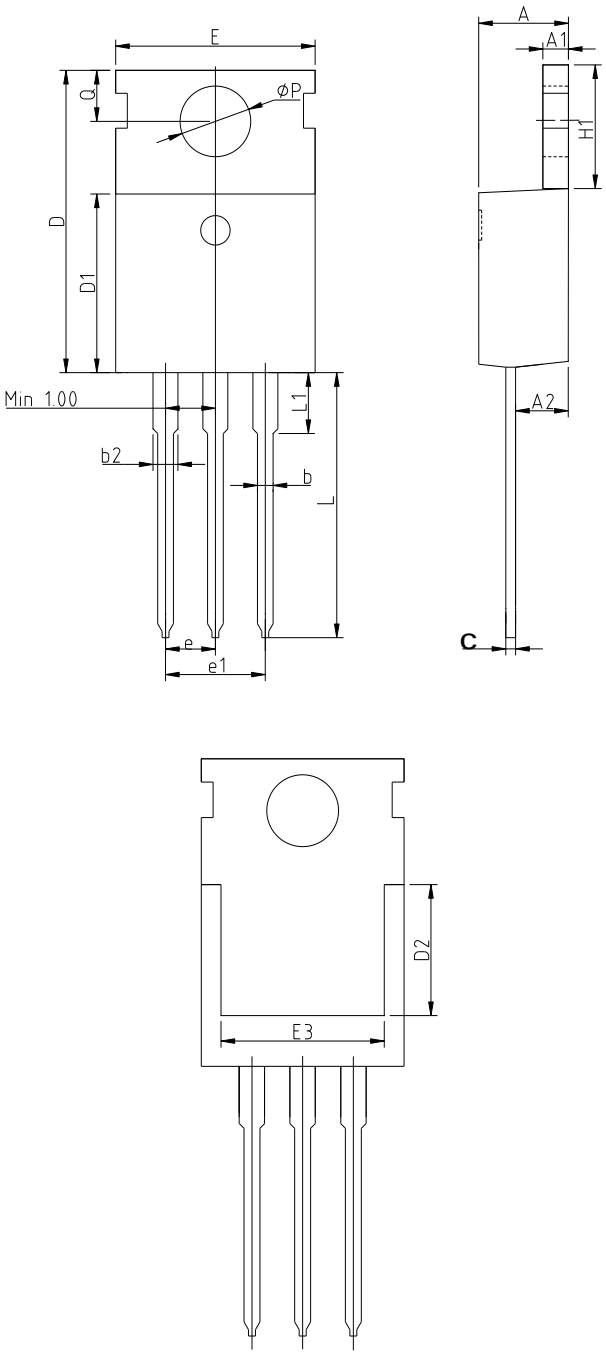
HYG045P03LQ2P/B

Device Per Unit

Package Type	Unit	Quantity
TO-220FB-3L	Tube	50
TO-263-2L	Reel	800

Package Information

TO-220FB-3L



COMMON DIMENSIONS			
SYMBOL	mm		
	MIN	NOM	MAX
A	4.37	4.57	4.77
A1	1.25	1.30	1.40
A2	2.20	2.40	2.60
b	0.70	0.80	0.95
b2	1.17	1.27	1.47
c	0.45	0.50	0.60
D	15.10	15.60	16.10
D1	8.80	9.10	9.40
D2	5.50	6.30	7.10
E	9.70	10.00	10.30
E3	7.00	7.80	8.60
e	2.54 BSC		
e1	5.08 BSC		
H1	6.25	6.50	6.85
L	12.75	13.50	13.80
L1	-	3.10	3.40
ΦP	3.40	3.60	3.80
Q	2.60	2.80	3.00