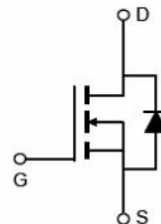


## Main Product Characteristics:

D	100
D ( )	18 ( .)
I <sub>D</sub>	40A



TO-220



Schematic Diagram

## Features and Benefits:

A FE

F  
150



## Description:

I

## Absolute Max Rating:

Symbol	Parameter	Max.	Units
I <sub>D</sub> @ c = 25 C	C D C , G @ 10	40	A
I <sub>D</sub> @ c = 100 C	C D C , G @ 10	24	
I <sub>D</sub>	D C	160	
D @ c = 25 C	D	119	
D	D -	100	
G	G - -	20	
J G	J	-55 +150	C

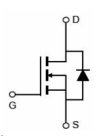
**Thermal Resistance**

Symbol	Characteristics	Typ.	Max.	Units
J <sub>C</sub>	J - -		1.05	/

**Electrical Characteristics @ T<sub>A</sub>=25**

Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
(B) D	D - -	100				V <sub>G</sub> = 0, I <sub>D</sub> = 250 A
D ( )	D - - -		18	24		V <sub>G</sub> = 10, I <sub>D</sub> = 20A
G ( )	G	2		4		V <sub>D</sub> = V <sub>G</sub> , I <sub>D</sub> = 250 A
I <sub>D</sub>	D - - =25 C			1	A	V <sub>D</sub> = 100, V <sub>G</sub> = 0,
I <sub>G</sub>	G - -			100	A	V <sub>D</sub> = 20, V <sub>D</sub> = 0
				-100		V <sub>D</sub> = -20, V <sub>D</sub> = 0
			80		C	V <sub>G</sub> = 10, V <sub>D</sub> = 50, I <sub>D</sub> = 20A
	G - -		21			
	G - -D (" ")		23			
( )	-		18		F	V <sub>G</sub> = 10 V <sub>D</sub> = 50 V <sub>G</sub> = 6 I <sub>D</sub> = 20A
			28			
( )	-		46			
	F		11			
C	I		3820		F	V <sub>G</sub> = 0 V <sub>D</sub> = 25 t <sub>1</sub> = 1 H
C			198			
C			157			

**Source-Drain Ratings and Characteristics**

Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
I	C C (B D )			40	A	FE 
I	C (B D )			160	A	
I <sub>D</sub>	D F			1.2		I <sub>G</sub> = 20A, V <sub>G</sub> = 0
			44			T <sub>J</sub> = 25 C, I <sub>F</sub> = 15A, t <sub>1</sub> =
	C		72		C	100A/

## **Test Circuits and Waveforms**

**EAS Test Circuit:**

**Gate Charge Test Circuit:**

**Switching Time Test Circuit:**

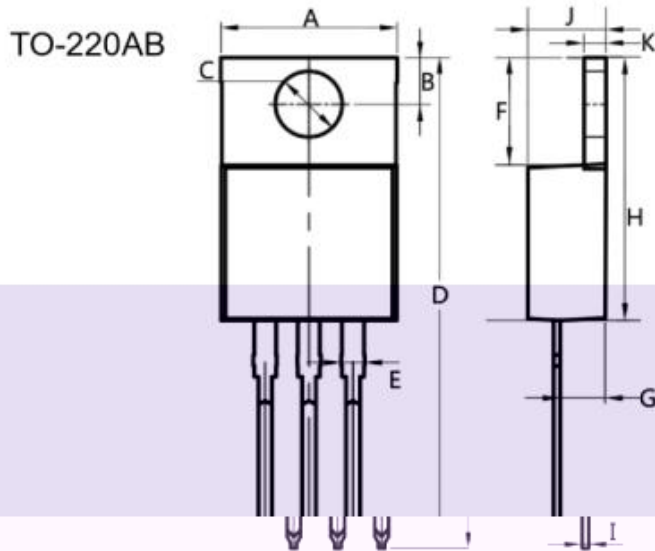
**Switching Waveforms:**

### **Notes:**

C

Mechanical Data

Unit:mm



Dim.	Min.	Max.
A	10.0	10.4
B	2.5	3.0
C	3.5	4.0
D	28.0	30.0
E	1.1	1.5
F	6.2	6.6
G	2.9	3.3
H	15.0	16.0
I	0.35	0.45
J	4.3	4.7
K	1.2	1.4

All Dimensions in millimeter.



ON RA

TENTIC

A

C

( )

MEMORANDUM ( ) C .L . H

EXW

