

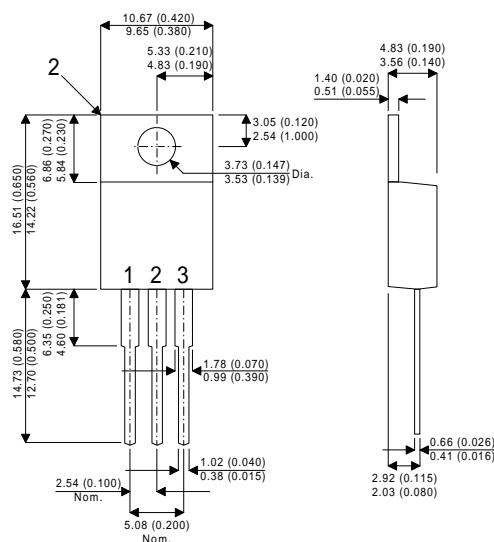


**SEME
LAB**

BFC60

TO220-AC Package Outline.

Dimensions in mm (inches)



Pin 1 – Gate

Pin 2 – Drain

Pin 3 – Source

N-CHANNEL ENHANCEMENT MODE HIGH VOLTAGE ISOLATED POWER MOSFETS

V_{DSS} **1500V**

I_{D(cont)} **0.1A**

R_{DS(on)} **140Ω**

ABSOLUTE MAXIMUM RATINGS (T_{AMB} = 25°C unless otherwise stated)

V _{DSS}	Drain – Source Voltage	1500	V
I _D	Continuous Drain Current	0.1	A
I _{DM}	Pulsed Drain Current	0.2	A
V _{GS}	Gate – Source Voltage	±20	V
P _D	Total Power Dissipation	20	W
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_{AMB} = 25°C unless otherwise stated)

Characteristic	Test Conditions	Min.	Typ.	Max.	Unit	
BV _{DSS}	Drain – Source Breakdown Voltage	V _{GS} = 0V, I _D = 1mA	1500		V	
R _{DS(ON)}	Drain – Source On State Resistance	V _{GS} = 10V, I _D = 50mA		140	200	Ω
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 1200V, V _{GS} = 0V		100	μA	
I _{GSS}	Gate – Source Leakage Current	V _{GS} = ±20V, V _{DS} = 0V		±100	nA	
V _{GS(off)}	Cutoff Voltage	V _{DS} = 10V, I _D = 1.0mA	1.5	3.5	V	
C _{iss}	Input Capacitance	V _{DS} = 20V f = 1MHz	40		pF	
C _{oss}	Output Capacitance		12			
C _{rss}	Reverse Transfer Capacitance		3.0			
t _{on}	Turn-on Time	V _{GS} = 10V	40		ns	
t _{off}	Turn-off Time	I _D = 50mA	400			
V _{SD}	Diode Forward Voltage	V _{GS} = 0, I _S = 0.1A	1.0	1.5	V	
Y _{FS}	Forward Transfer Admittance	V _{DS} = 20V, I _D = 50mA	50	100	mS	