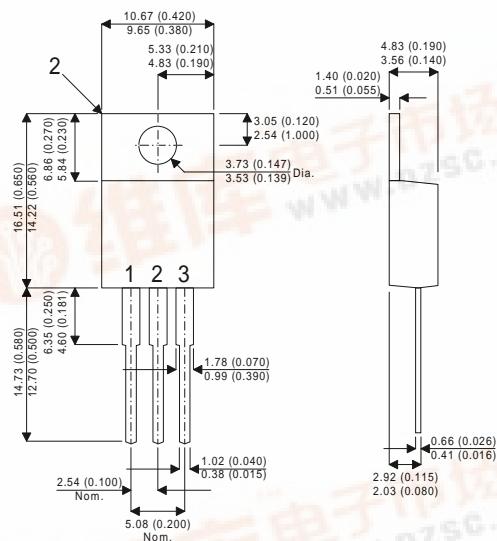


BFC60

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 $I_{D(\text{cont})}$ 0.1A $R_{DS(\text{on})}$ 140ΩABSOLUTE MAXIMUM RATINGS ($T_{\text{AMB}} = 25^\circ\text{C}$ 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 ($T_{\text{AMB}} = 25^\circ\text{C}$ unless otherwise stated)

Characteristic	Test Conditions	Min.	Typ.	Max.	Unit	
BV_{DSS}	Drain – Source Breakdown Voltage	$V_{GS} = 0\text{V}$, $I_D = 1\text{mA}$	1500		V	
$R_{DS(\text{ON})}$	Drain – Source On State Resistance	$V_{GS} = 10\text{V}$, $I_D = 50\text{mA}$		140	200	Ω
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS} = 1200\text{V}$, $V_{GS} = 0\text{V}$		100	100	μA
I_{GSS}	Gate – Source Leakage Current	$V_{GS} = \pm 20\text{V}$, $V_{DS} = 0\text{V}$			± 100	nA
$V_{GS(\text{off})}$	Cutoff Voltage	$V_{DS} = 10\text{V}$, $I_D = 1.0\text{mA}$	1.5		3.5	V
C_{iss}	Input Capacitance	$V_{DS} = 20\text{V}$	40			pF
C_{oss}	Output Capacitance	$f = 1\text{MHz}$	12			
C_{rss}	Reverse Transfer Capacitance		3.0			
t_{on}	Turn-on Time	$V_{GS} = 10\text{V}$	40			ns
t_{off}	Turn-off Time	$I_D = 50\text{mA}$	400			
Diode Forward Voltage	$V_{GS} = 0\text{V}$, $I_S = 0.1\text{A}$		1.0	1.5	V	
Forward Transfer Admittance	$V_{DS} = 20\text{V}$, $I_D = 50\text{mA}$	50	100		mS	