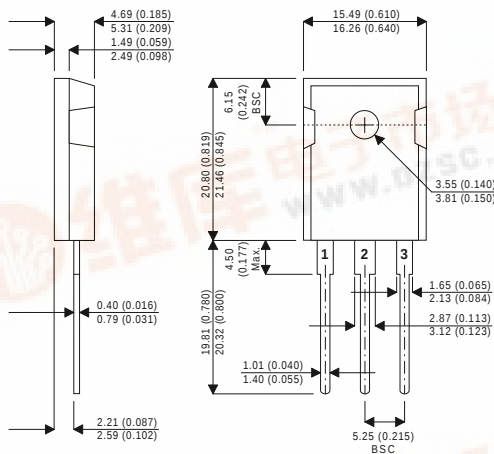


BFC40

TO247-AD Package Outline.
Dimensions in mm (inches)



N-CHANNEL ENHANCEMENT MODE HIGH VOLTAGE ISOLATED POWER MOSFETS

V_{DS} 1500V
 $I_{D(cont)}$ 2A
 $R_{DS(on)}$ 8.00Ω

Pin 1 – Gate Pin 2 – Drain Pin 3 – Source

ABSOLUTE MAXIMUM RATINGS ($T_{AMB} = 25^{\circ}\text{C}$ unless otherwise stated)

V_{DS}	Drain – Source Voltage	1500	V
I_D	Continuous Drain Current	2	A
I_{DM}	Pulsed Drain Current	4	A
V_{GS}	Gate – Source Voltage	±20	V
P_D	Total Power Dissipation	50	W
T_J, T_{STG}	Operating and Storage Junction Temperature Range	–55 to +150	°C

ELECTRICAL CHARACTERISTICS ($T_{AMB} = 25^{\circ}\text{C}$ unless otherwise stated)

	Characteristic	Test Conditions	Min.	Typ.	Max.	Unit
BV_{DS}	Drain – Source Breakdown Voltage	$V_{GS} = 0V, I_D = 1mA$	1500			V
$R_{DS(ON)}$	Drain – Source On State Resistance	$V_{GS} = 10V, I_D = 1A$		8.0	11.0	Ω
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS} = 1200V, V_{GS} = 0V$			100	μA
I_{GSS}	Gate – Source Leakage Current	$V_{GS} = \pm 20V, V_{DS} = 0V$			±100	nA
$V_{GS(off)}$	Cutoff Voltage	$V_{DS} = 10V, I_D = 1.0mA$	1.5		3.5	V
C_{iss}	Input Capacitance	$V_{DS} = 20V$ $f = 1MHz$		550		pF
C_{oss}	Output Capacitance			90		
C_{rss}	Reverse Transfer Capacitance			30		
t_{on}	Turn-on Time	$V_{GS} = 10V$		30		ns
t_{off}	Turn-off Time	$I_D = 1A$		200		
V_{SD}	Diode Forward Voltage	$V_{GS} = 0, I_S = 2A$		1.0	1.5	V
Y_{FSI}	Forward Transfer Admittance	$V_{DS} = 20V, I_D = 1A$	1.0	1.5		S