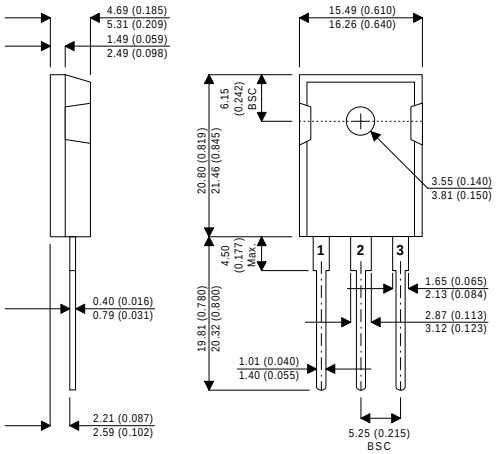
SEME LAB

BFC40

TO247–AD Package Outline.

Dimensions in mm (inches)



N–CHANNEL ENHANCEMENT MODE HIGH VOLTAGE ISOLATED POWER MOSFETS

V_{DSS} 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°C unless otherwise stated)

V_{DSS}	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°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 = 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} = ±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 I_D = 1A		30		ns
t_{off}	Turn-off Time			200		
V_{SD}	Diode Forward Voltage	V_{GS} = 0 , I_S = 2A		1.0	1.5	V
$\|Y_{FS}\|$	Forward Transfer Admittance	V_{DS} = 20V , I_D = 1A	1.0	1.5		S

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk