

EDCON-COMPONENTS



Specifications

Features

Glass passivated Die Construction
 Low Reverse Leakage Current; Low Power Loss, High Efficiency; Case to Terminal Isolation 2500V
 Electrically Isolated Epoxy Case for Maximum Heat Dissipation
 UL Registered under File Number # 157705

Mechanical Data

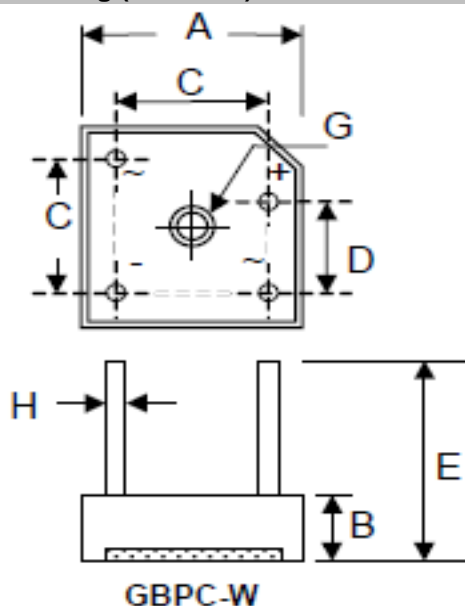
Molded plastic body with Heatsink, Available in both Style Low Profile and Standard Size
 Terminals: plated leads solderable per MIL-STD 202 Method 208
 Polarity symbols marked on body.
 Weight 3,8gram

Maximum Ratings & Electrical Characteristics Ratings at 25°C ambient temperature

	Sym bols	GBPC 5000W	GBPC 5001W	GBPC 5002W	GBPC 5004W	GBPC 5006W	GBPC 5008W	GBPC 5010W	GBPC 5012W	GBPC 5014W	GBPC 5016W	Unit
Maximum reecurrent peak reverse Voltage	VRRM	50	100	200	400	600	800	1000	1200	1400	1600	Volt
Maximum rms Input voltage	VRMS	35	70	140	280	420	560	700				Volt
Maximum dc blocking Voltage	VDC	50	100	200	400	600	800	1000	1200	1400	1600	Volt
Average Rectified Output Current Note 1 @ Ta=50°C	Io	50,0										Amps
Non-Repetitive Peak Forward Surge Current 8,3ms Single half wave superimposed on rated load (Jedec Method)		450										Amps
Forward Voltage per leg		1,1										V
Peak Reverse Current Ta=25°C At Rated DC Blocking Voltage Ta=125°C		5,0 500										µA
I²t Rating for Fusing (t<8,3ms) (Note 2)		800,0										A²sec
Typical Juntion Capacitance (Note 3)		400										pf
Typical Thermal Resistacne per leg (Note 1)		1,0										°C/W
Operating and Storage Temperature Range		-65 ~ +150										°C

Technical Drawing (Unit: mm)

	Low Profile Size	Standard Size
Dim	min	max.
A	28,4	28,7
B	7,50 / 10,97	8,50 / 11,23
C	17,1	19,1
D	10,9	11,9
E	30,5	---
G	Hole f. #10 screw 5,08Ø Nom.	
H	Ø 0,97	Ø 1,07



Note (1) Mounted on 105x105x3,0mm AL-plate (2) Non-repetitive, for t>1ms and < 8,3ms. (3) Measured at 1,0MHz and applied reverse voltage of 4.0 VDC

**Quad Bridge Rectifier 50A
(Glass Passivated)**

EDCON-Ser. **E18010**

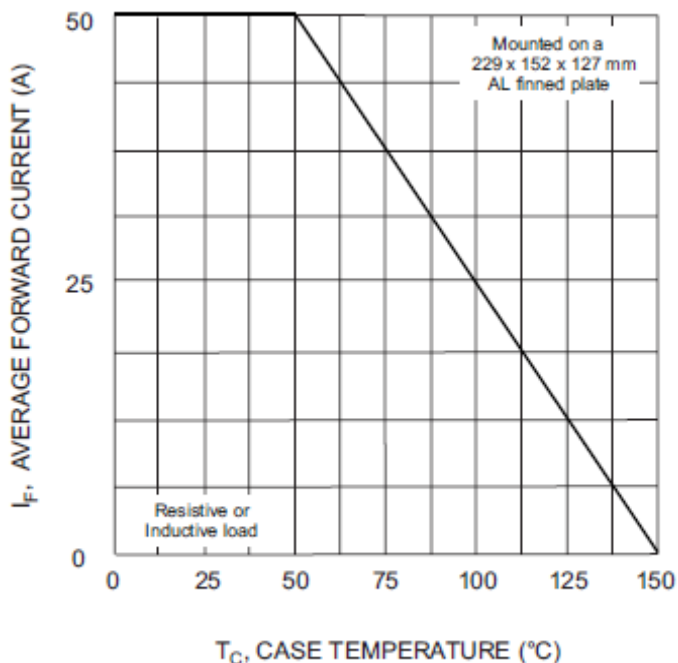
International Serie: **GBPC50xxW**

DRW:	Jason	CHKD:	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	10.05.2010
APPD:	Schumi			FINISH	Jamy		Sheet No.	1 from 5	

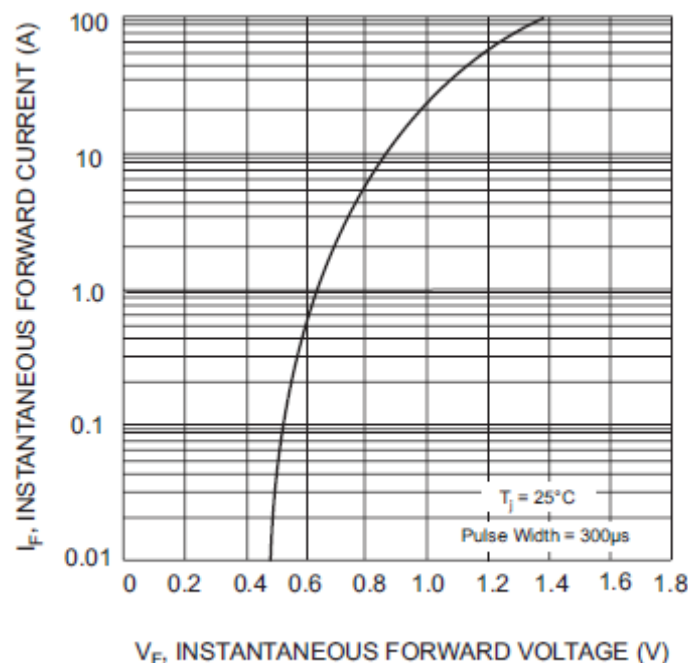
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Rating & Characteristics Curves (TA=25°C unless otherwise noted)



T_C, CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)

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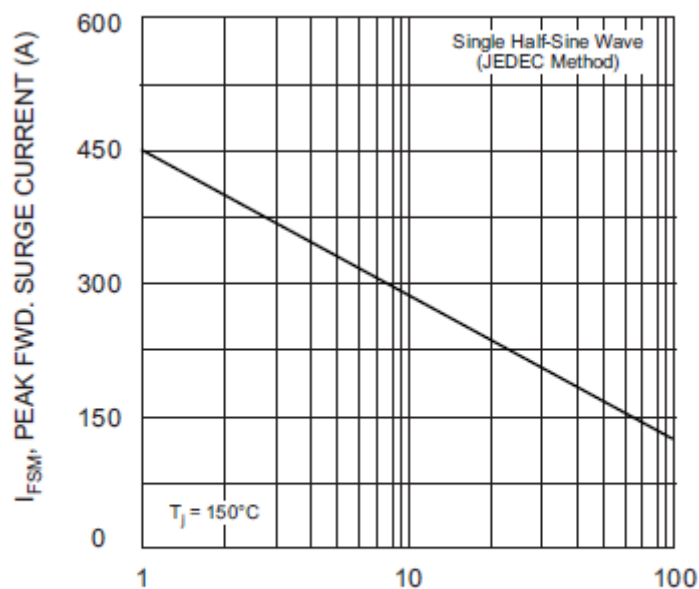


Fig. 3 Max Non-Repetitive Surge Current

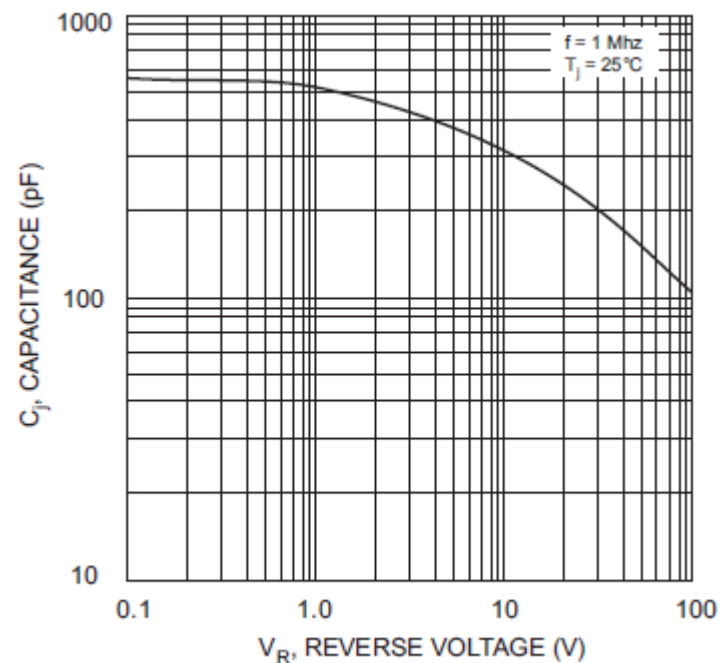


Fig. 4 Typical Junction Capacitance (per element)

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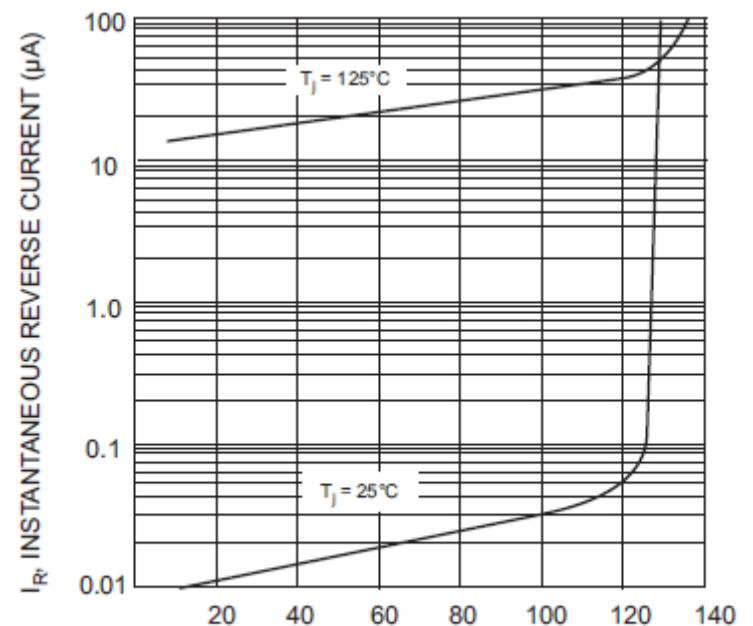


Fig. 5 Typical Reverse Characteristics (per element)

Ordering Informations

EDCON Serie	International Type	Lead Function	ROHS	Package
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E18010	GBPC50xxW	LL	R	BX
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Look Voltage Code Table	LL = Long Lead	R = ROHS Conform	BX = Box Packing
	L4 = 4mm Lead Length	N = NON ROHS Conform	

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Soldering Profile Curve

Classification Reflow Profile (JEDEC J-STD-020C)



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