

EDCON-COMPONENTS



Specifications

Features

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

Mechanical Data

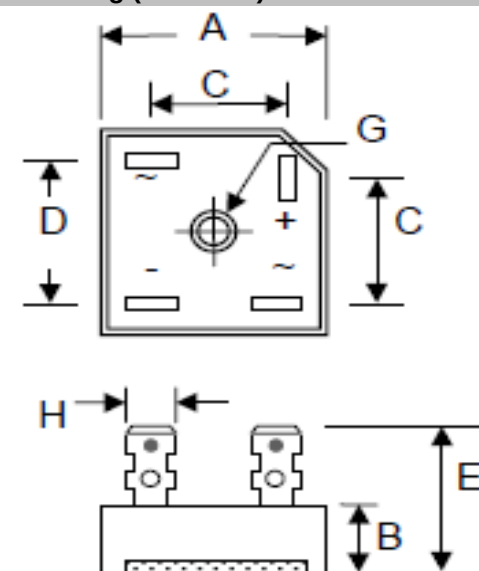
Molded plastic body with Heatsink, Available in both Style Low Profile and Standard Size
Terminals: plated leads solderable per MIL-STD 202 Method 208
Polarity symbols marked on body.
Weight 3,8gram

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

	Sym bols	GBPC 5000	GBPC 5001	GBPC 5002	GBPC 5004	GBPC 5006	GBPC 5008	GBPC 5010	GBPC 5012	GBPC 5014	GBPC 5016	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
I ² t 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	15,7	16,7
D	17,5	18,5
E	19,08/ 22,86	21,58/ 25,40
G	Hole f. #10 screw 5,08Ø Nom.	
H	6,35 typical	



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.

E16006

International
Serie:

GBPC50xx

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

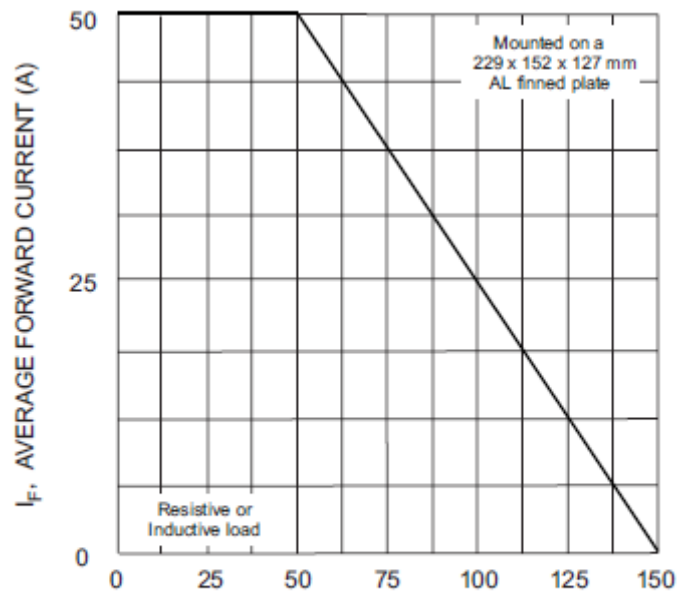
www.edcon-components.com

email: info@edcon-components.com

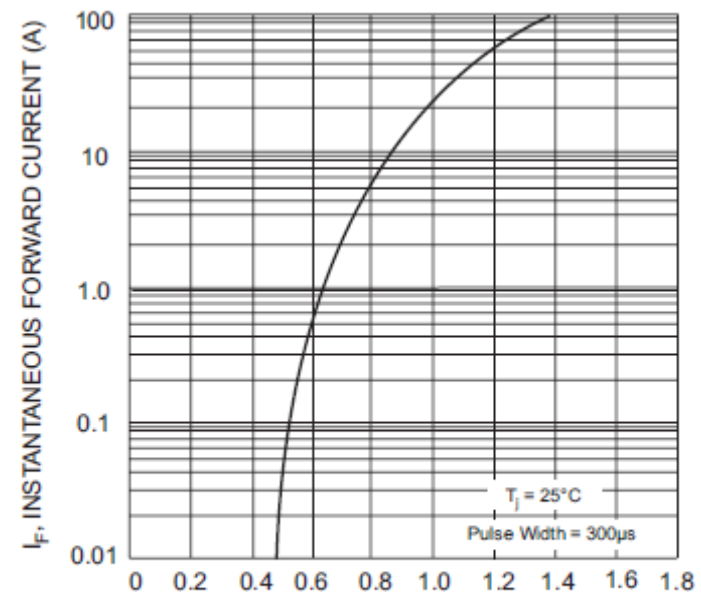
EDCON-COMPONENTS



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)

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

EDCON-Ser. **E16006**

International
Serie: **GBPC50xx**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	10.05.2010
APPD:	Schumi			FINISH	Jamy		Sheet No.	2 from 5	

www.edcon-components.com

email: info@edcon-components.com

EDCON-COMPONENTS



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

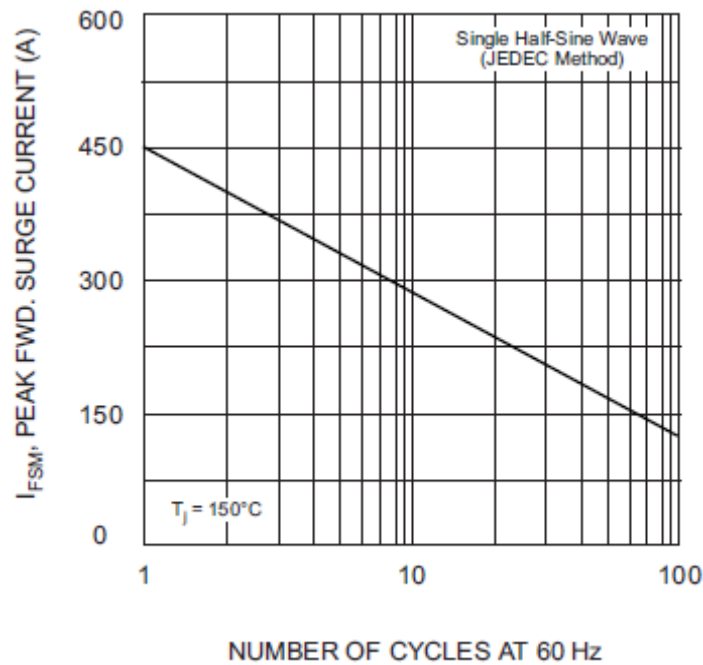


Fig. 3 Max Non-Repetitive Surge Current

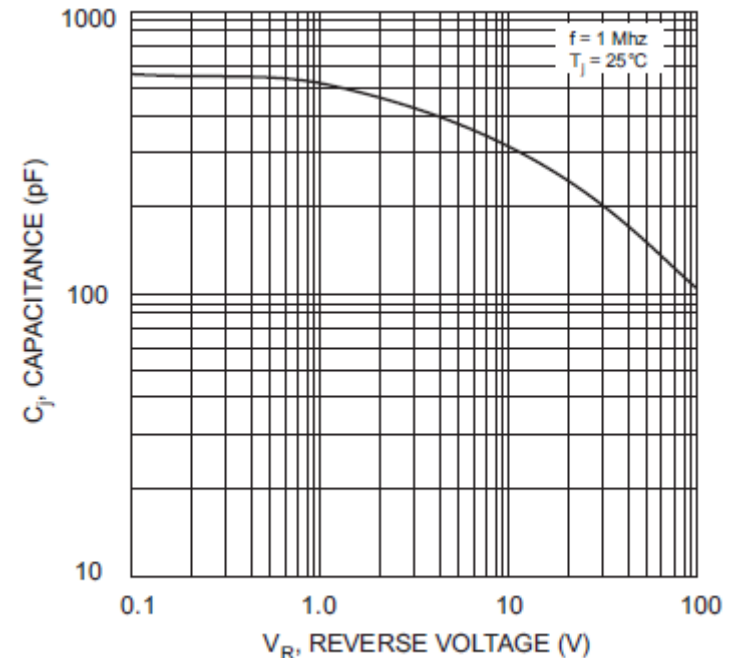


Fig. 4 Typical Junction Capacitance (per element)

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

EDCON-Ser. **E16006**

International
Serie: **GBPC50xx**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	10.05.2010
APPD:	Schumi			FINISH	Jamy		Sheet No.	3 from 5	

www.edcon-components.com

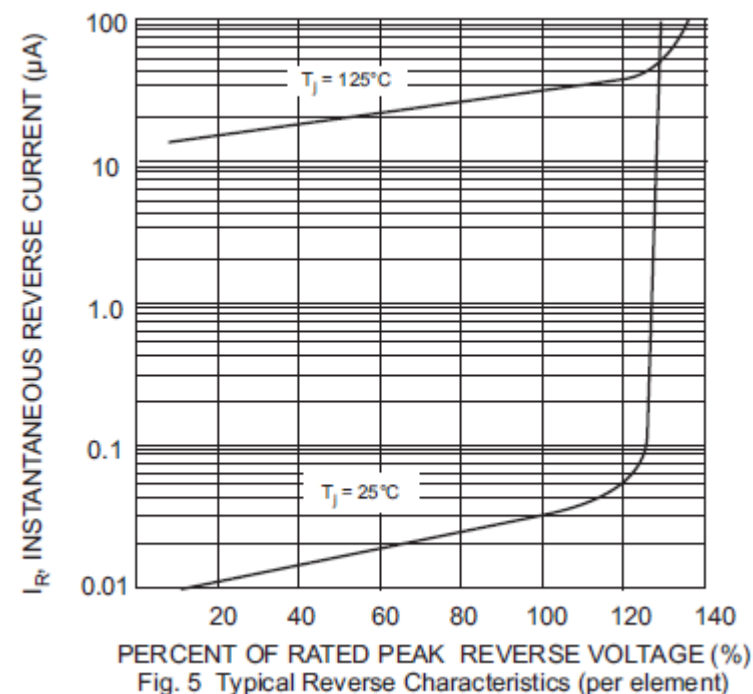
email: info@edcon-components.com

Copyright by EDCON-COMPONENTS

EDCON-COMPONENTS



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



Ordering Informations

EDCON Serie	International Type	No function	ROHS	Package
-------------	--------------------	-------------	------	---------

E16006	GBPC50xx	xx	R	BX
--------	----------	----	---	----

Look Voltage Code Table		R= ROHS Conform	BX= Box Packing
		N= NON ROHS Conform	

Quad Bridge Rectifier 50A (Glass Passivated)	
EDCON-Ser.	E16006
International Serie:	GBPC50xx

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	10.05.2010
APPD:	Schumi			FINISH	Jamy		Sheet No.		4 from 5

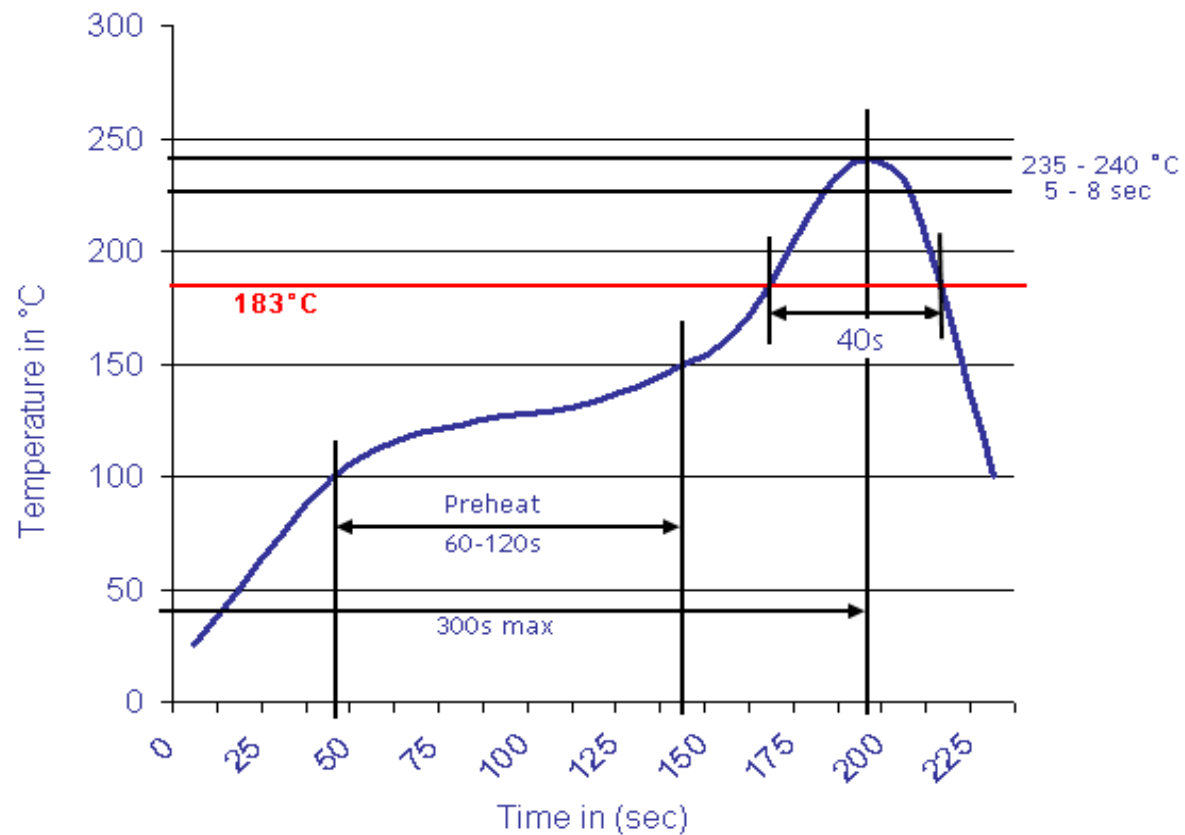
www.edcon-components.com

email: info@edcon-components.com



Soldering Profile Curve

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



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

EDCON-Ser. **E16006**

International
Serie: **GBPC50xx**

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