

Power Bridge Rectifiers

FEATURES

- · High surge current capability
- · Easy chassis mounting
- High voltage ratings up to 1600V
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

-

APPLICATIONS

- Battery charges
- DC motor drives
- · Various rectifiers

ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Repetitive Peak Reverse Voltage	1600	V
lo	Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55℃	35	А
I _{FSM}	Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, Ta=25℃	425	А
I² t	Current Squared Time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	750	A ² S
T_J	Junction Temperature	-55~150	$^{\circ}$
T _{stg}	Storage Temperature Range	-55~150	$^{\circ}$ C
V_{dis}	Dielectric Strength, Terminals to case. AC 1 minute	2.5	KV

1



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case		°C/W

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _{FM}	Forward Voltage drop	I _{FM} = 17.5A	1.2	V
I _{RRM}	Repetitive Peak Reverse Current	$V_R = V_{RRM}$	10	uA

■ Characteristics (Typical)

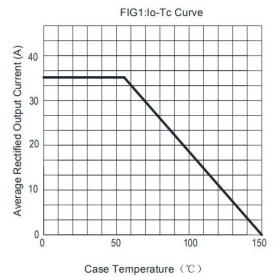


FIG3:Instantaneous Forward Voltage

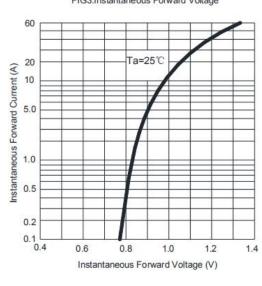


FIG2:Surge Forward Current Capability

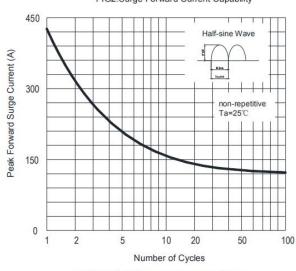
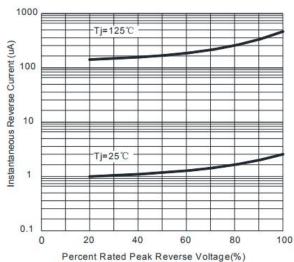


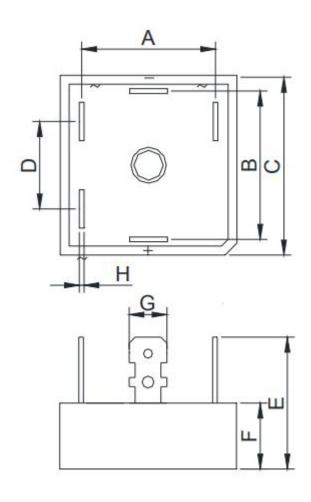
FIG4: Typical Reverse Characteristics





PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394)



DIM	mm		
DIM	MIN	MAX	
Α	23.1	24.1	
В	23.1	24.1	
С	28.2	28.8	
D	16	17	
E	/	25	
F	10.8	11.2	
G	6.2	6.4	
Н	0.75	0.85	

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications. ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.