



Bridge Rectifiers

Features

w4 M

S-compliant

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Polarity: As marked on body

Maximum Ratings ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJ5010D	
Device marking code			GBJ5010D	
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1600	
Maximum RMS Voltage	VRMS	V	1120	
Maximum DC blocking Voltage	VDC	V	1600	
Average rectified output current @60Hz sine wave, R-load,	With heatsink $T_c = 50$	IO	A	50.0
	Without heatsink $T_a = 25$			5.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25$	IFSM	A	500	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25$			1000	
Current squared time @1ms t 8.3ms $T_j=25$, Rating of per diode	I^2t	A ² s	1037.5	
Storage temperature	T_{stg}		-55 ~ +150	
Junction temperature	T_j			



GBJ5010D

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ5010D
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=25A$	1.1
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j=25$	5
			$T_j=125$	500
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	160

Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	GBJ5010D	
Thermal Resistance	Between junction and ambient, Without heatsink	R J-A	/W	18.0
	Between junction and case, With heatsink	R J-C		1.0

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ5010D	B1	Approximate 6.5	15	750	1500	TUBE

