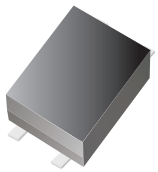
Low Profile SMD Bridge Rectifiers

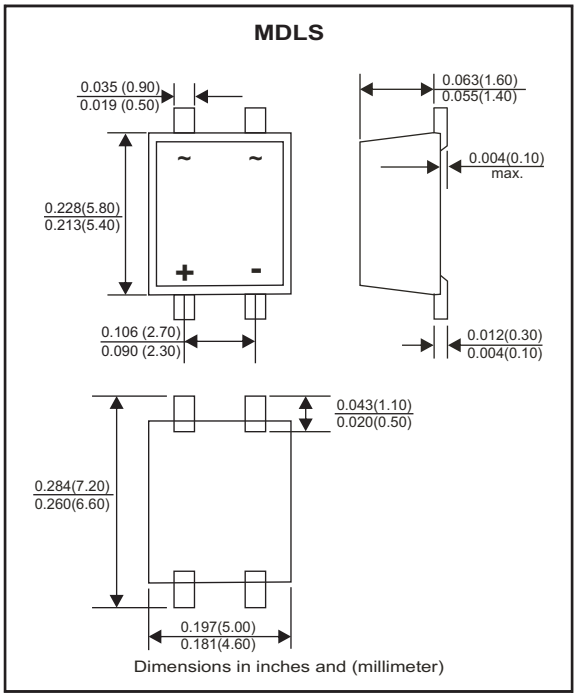
CGRHD101-G Thru. CGRHD107-G

Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 A
RoHS Device



Features

- Surge overload ratings to 35 amperes peak.
- 1.0A rating in low profile surface mount min-dip bridge save space on printed circuit board.
- Ideal for automated replacement.
- Glass passivated chip junctions.
- UL recognized file # E321971



Mechanical data

-Epoxy: UL94-V0 rate flame retardant.

-Case: Molded plastic low profile SMD mini-dip(MDLS), Bridge case

-Terminals: solderable per MIL-STD-750,method 2026.

-Polarity: Marking on body.

-Mounting Position: Any

-weight: 0.10 grams (approx.).

Maximum Rating And Electrical Characteristics

Rating at TA=25°C, unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter		Symbol	CGRHD 101-G	CGRHD 102-G	CGRHD 103-G	CGRHD 104-G	CGRHD 105-G	CGRHD 106-G	CGRHD 107-G	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum Continuous Reverse Voltage		V_R	50	100	200	400	600	800	1000	V
Maximum Forward Rectified Current		$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3mS single half sine-wave, superimposed on rate load(JEDEC Method)		I_{FSM}	35							A
Maximum Forward Voltage	at I_F=0.5A	V_F	1.0							V
	at I_F=1.0A	V_F	1.1							
Maximum Reverse Current	@V_R=V_{RRM} T_J=25°C	I_R	5.0							μA
	@V_R=V_{RRM} T_J=100°C	I_R	150							
Typical Thermal Resistance	Junction to ambient,note 1	$R_{\theta JA}$	62.5							°C/W
	Junction to lead	$R_{\theta JL}$	25.0							
Typical Junction Capacitance (Per leg, note 2)		C_J	25							pF
Operating Temperature Range		T_J	-55 to +150							°C
Storage Temperature Range		T_{STG}	-65 to +175							°C

Notes: 1. Thermal resistance from Junction to Ambient and from junctionto lead mounted on glass epoxy P.C.B 0.8*0.8(20*20mm) copper pad.
2. Measure at 1.0 MHz and applied reverse voltage of 4.0 votls.

RATING AND CHARACTERISTIC CURVES (CGRHD101-G thru CGRHD107-G)

Fig.1 - Forward Current Derating Curve

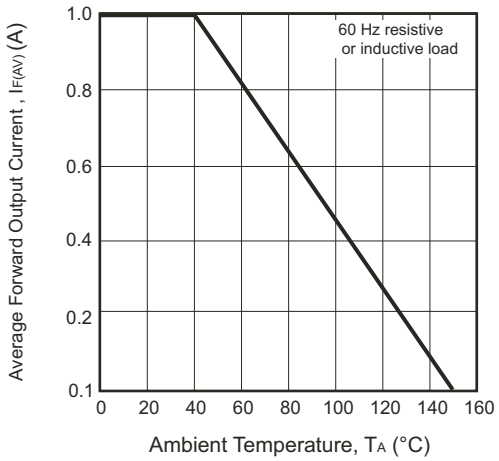


Fig.2 - Maximum Non-Repetitive Peak Forwafd Surge Current

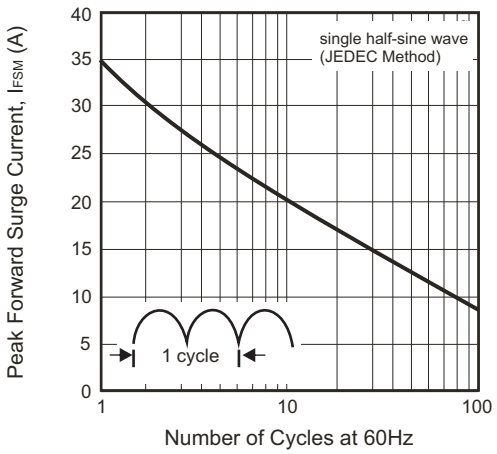


Fig.3 - Typical Instantaneour Forward Characteristics (Per Leg)

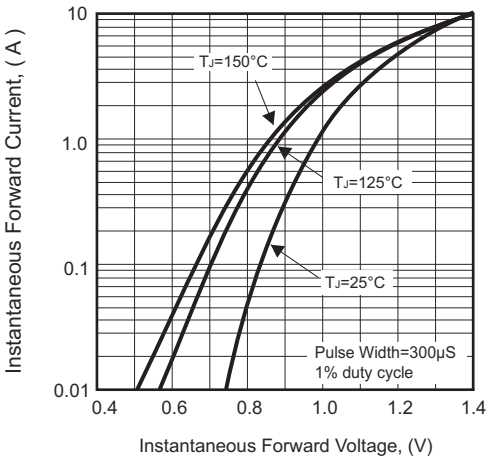


Fig.4 - Typical Reverse Characteristics (Per Leg)

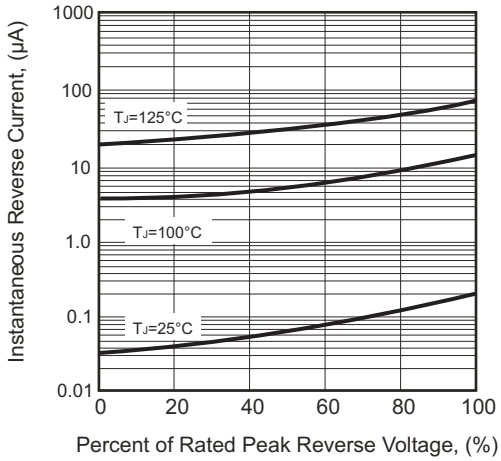
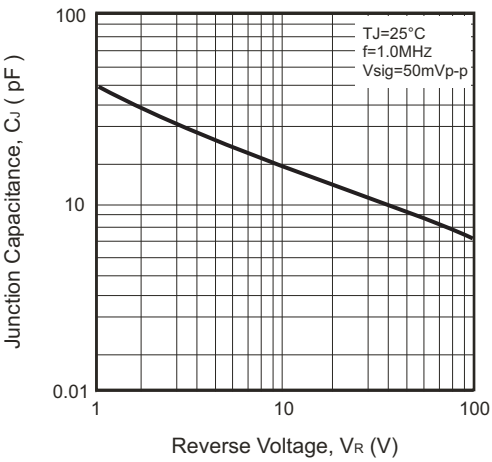
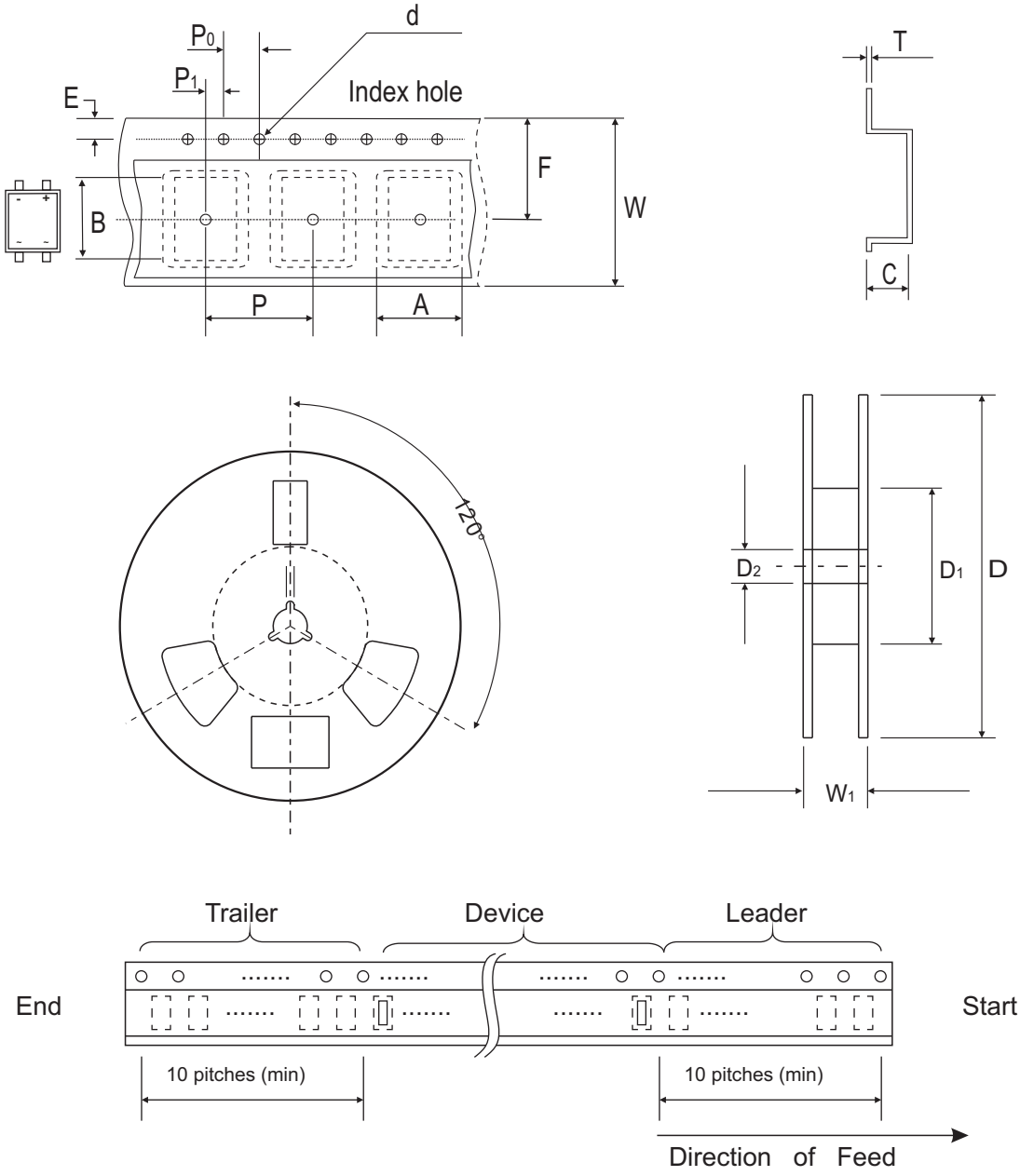


Fig.5 - Typical Junction Capacitance (Per Leg)



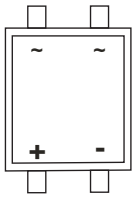
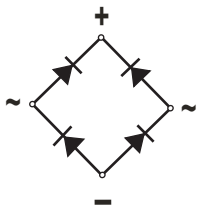
Reel Taping Specification



	SYMBOL	A	B	C	d	D	D_1	D_2
MDLS	(mm)	5.05 ± 0.10	7.01 ± 0.10	1.70 ± 0.10	1.50 ± 0.05	330 ± 1.50	75.00 ± 1.00	13.50 ± 0.50
	(inch)	0.199 ± 0.004	0.276 ± 0.004	0.067 ± 0.004	0.059 ± 0.002	12.99 ± 0.059	2.95 ± 0.039	0.531 ± 0.020

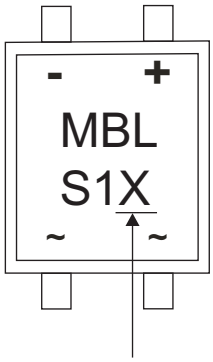
	SYMBOL	E	F	P	P_0	P_1	W	W_1
MDLS	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.25	12.0 ± 0.15	13.5 ± 0.50
	(inch)	0.069 ± 0.004	0.217± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.010	0.472 ± 0.006	0.531 ± 0.020

Pinning information

Simplified outlin	Part Number
	

Marking Code

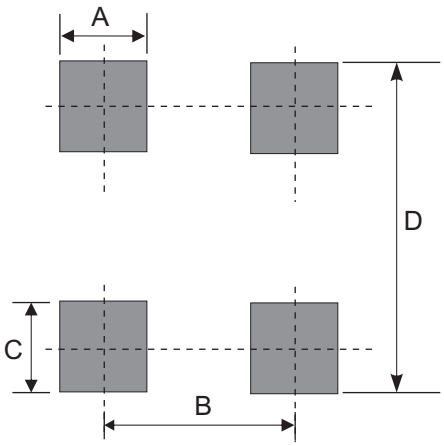
Part Number	Marking code
CGRHD101-G	MBLS1A
CGRHD102-G	MBLS1B
CGRHD103-G	MBLS1D
CGRHD104-G	MBLS1G
CGRHD105-G	MBLS1J
CGRHD106-G	MBLS1K
CGRHD107-G	MBLS1M



X = Product type marking code

Suggested PAD Layout

SIZE	MDLS	
	(mm)	(inch)
A	1.50	0.059
B	1.80	0.071
C	1.20	0.047
D	5.40	0.213



Standard Packaging

Case Type	Reel	
	Qty Per Reel	Reel Size
	(Pcs)	(inch)
MDLS	5,000	13