



WILLAS



MD1L
THRU
MD7L

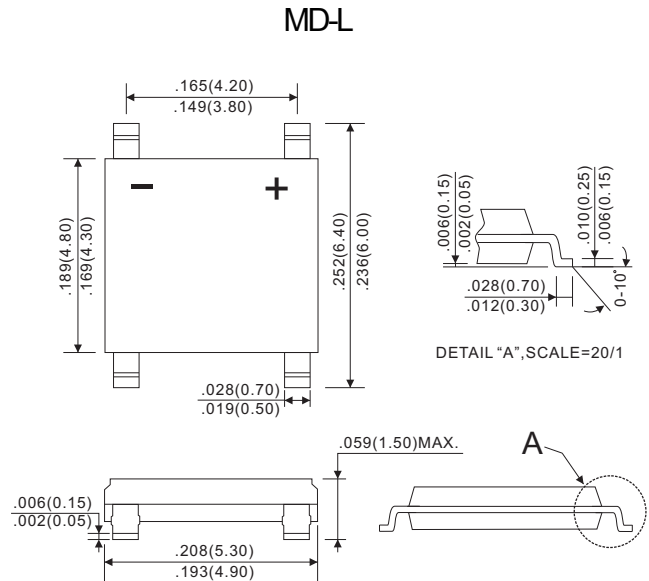
1.0 AMP SURFACE MOUNT FLAT SI- BRIDGE RECTIFIERS MD-L PACKAGE

FEATURES

- * Ideal for printed circuit board
- * Glass passivated chip
- * Reliable low cost construction utilizing molded plastic technique
- * High surge current capability
- * Small size, simple installation
- * High temperature soldering guaranteed:
260°C / 10 seconds / 0.375" lead length at lbs tension
- * **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"

MECHANICAL DATA

- * Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- * Epoxy: Device has UL flammability classification 94V-O
- * Polarity: Polarity symbol marked on body
- * Weight gram :0.088g (approximately)



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive of inductive load.

For capacitive load, derate current by 20%

RATINGS		SYMBOL	MD1L	MD2L	MD3L	MD4L	MD5L	MD6L	MD7L	UNIT
Marking Code			MD1L	MD2L	MD3L	MD4L	MD5L	MD6L	MD7L	
Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum Alternating Input Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum Average Forward Rectified Current on aluminum substrate		I _{F(AV)}	1.0						Amps	
Rectified Current on glass-epoxy P.C.B.			0.8							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load		I _{FSM}	30.0						Amps	
Rating for fusing (t<8.3ms)		I ² t	3.5						A ² sec	
Typical Thermal Resistance		junction to case		R _{θJC}						°C / W
		junction to lead		R _{θJL}						
		on aluminum Substrate		62.5						
				on glass-epoxy P.C.B.		R _{θJA}				
Storage and Operating Junction Temperature Range		T _{stg} , T _J	-55 to +150						°C	

CHARACTERISTICS		SYMBOL	MD1L	MD2L	MD3L	MD4L	MD5L	MD6L	MD7L	UNIT
Maximum Forward Voltage Range at 0.4A DC		V _F	0.95						Volts	
Maximum Reverse Current at @TA=25°C		I _R	5.0						μAmps	
Rated DC Blocking Voltage @TA=125°C			100.0							

1.0 AMP SURFACE MOUNT FLAT SI- BRIDGE RECTIFIERS

MD-L PACKAGE

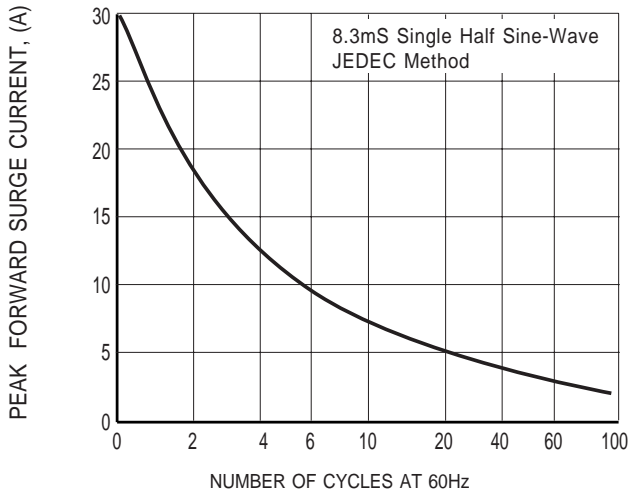


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

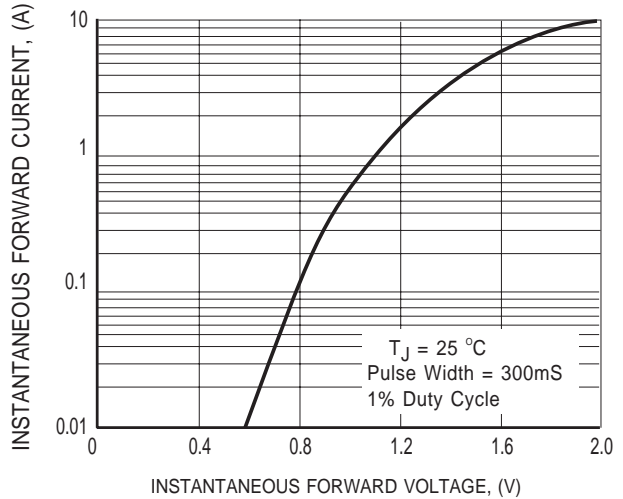


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

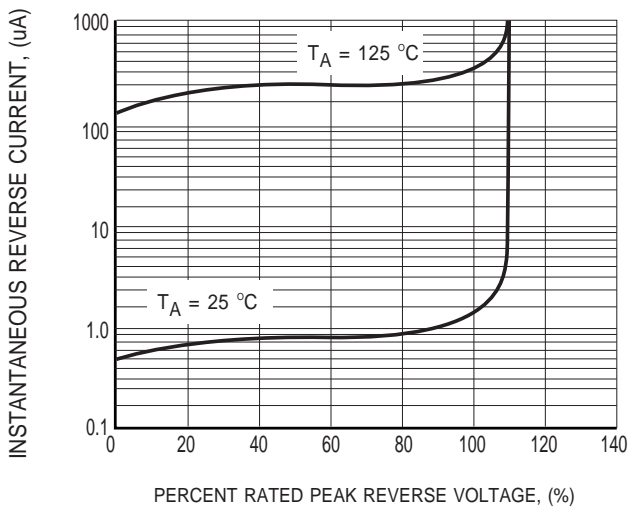


FIG.3 TYPICAL REVERSE CHARACTERISTICS

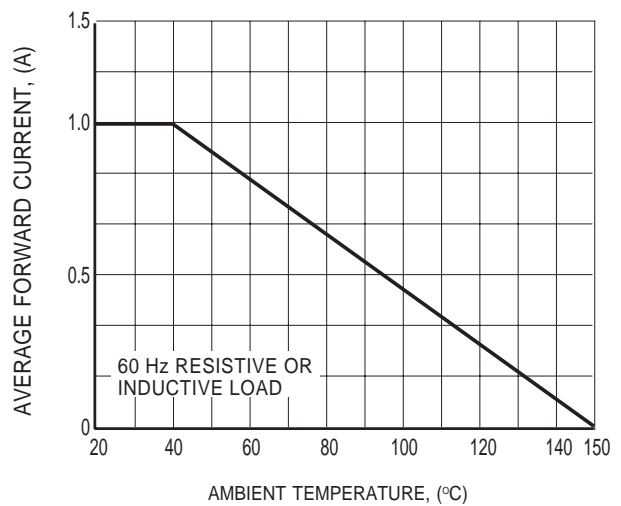


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE