MD1S thru MD7S

表面安装桥式整流二极管

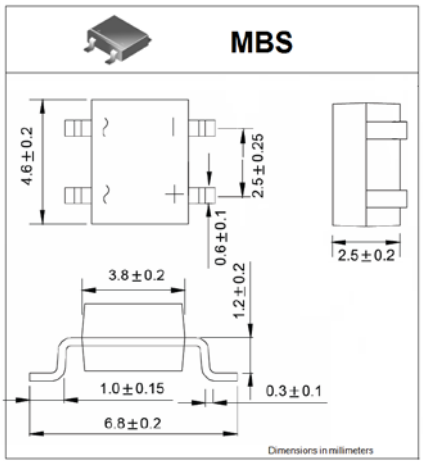
反向电压**50 --- 1000 V**

正向电流**0.8A**

Surface Mount Bridge Rectifiers

Reverse Voltage 50 to 1000 V

Forward Current 0.8 A



特征 Features

- 玻璃钝化芯片 Glass passivated chip junction
- 较强的正向浪涌承受能力 High forward surge capability
- 高温焊接保证 260℃/10秒 High temperature soldering guaranteed: 260/10seconds at terminals
- 引线和管体皆符合RoHS标准。 Lead and body according with RoHS standard

机械数据 Mechanical Data

- 封装: 塑料封装 Case: Molded plastic body
- 端子: 焊料被镀 Terminals: Solder plated
- 极性: 标记模压或印于本体 Polarity: Symbols molded or marked on body
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性 T_A = 25℃ 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25℃ambient temperature unless otherwise specified.

	Symbols	MD1S	MD2S	MD3S	MD4S	MD5S	MD6S	MD7S	Unit
最大反向峰值电压 Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
最大反向有效值电压 Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
最大正向平均整流电流 Maximum average forward rectified current — On glass-epoxy P.C.B. (1) / On aluminum substrate (2)	$I_{F(AV)}$	0.5 0.8							A
正向峰值浪涌电流 8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	30							A
最大反向峰值电流 @T_A = 75℃ Maximum peak reverse current full cycle	$I_{R(AV)}$	30							uA
典型热阻 Typical thermal resistance	$R_{\theta JA}$	75							℃/W
工作结温和存储温度 Operating junction and storage temperature range	T_J, T_{STG}	-50---+150							℃

电特性 T_A = 25℃除非另有规定。

Electrical Characteristics Ratings at 25℃ambient temperature unless otherwise specified.

	Symbols	MD1S	MD2S	MD3S	MD4S	MD5S	MD6S	MD7S	Unit
最大正向电压 IF = 0.4A Maximum forward voltage	V_F	1. 0							V
最大反向漏电流 Maximum reverse current — T_A= 25℃ / T_A= 100℃	I_R	5.0 100							uA
典型结电容 VR = 4.0V, f = 1MHz Type junction capacitance	C_J	13							pF

Notes: (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3 mm) pads
(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20 mm) mounted on 0.05 x 0.05" (1.3 x 1.3 mm) solder pad

特性曲线 （T_A = 25℃ 除非另有规定)

RATINGS AND CHARACTERISTICS CURVES(T_A = 25 °C unless otherwise noted)

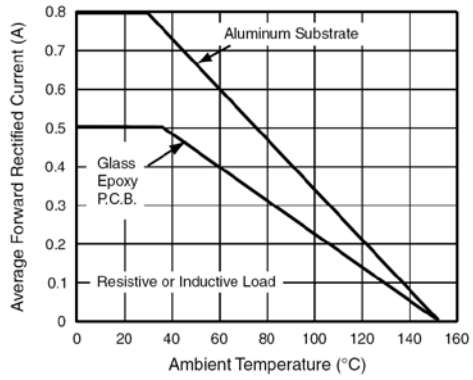


Figure 1. Derating Curve for Output Rectified Current

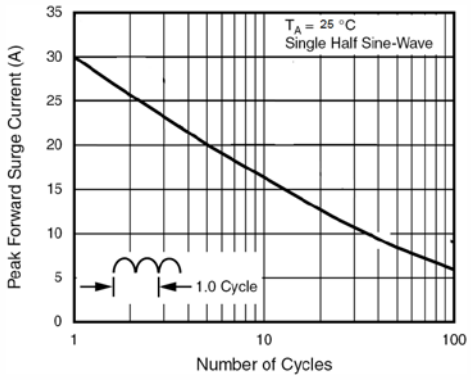


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

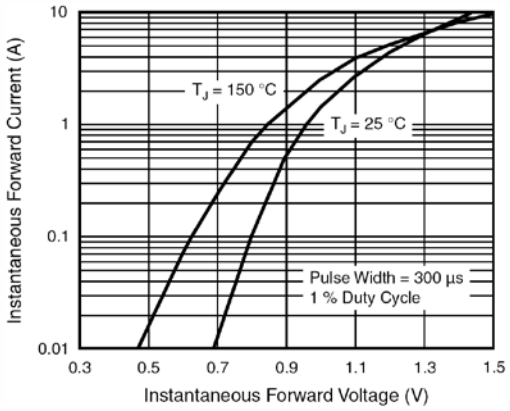


Figure 3. Typical Forward Voltage Characteristics Per Diode

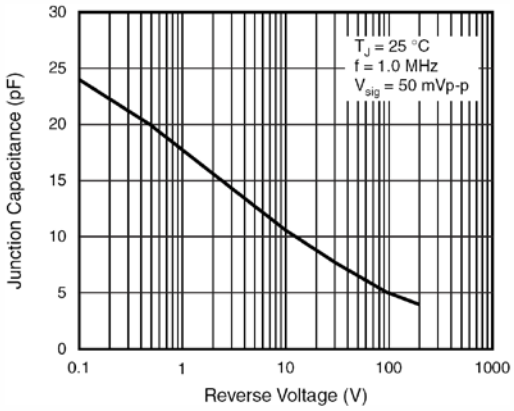


Figure 5. Typical Junction Capacitance Per Diode

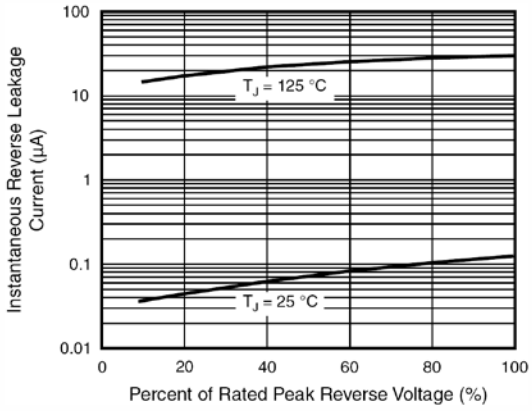
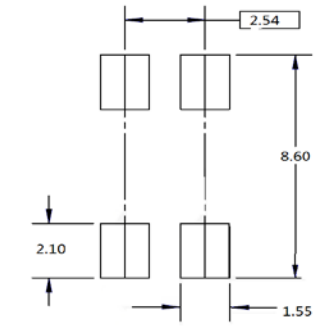


Figure 4. Typical Reverse Leakage Characteristics Per Diode

Mounting Pad Layout



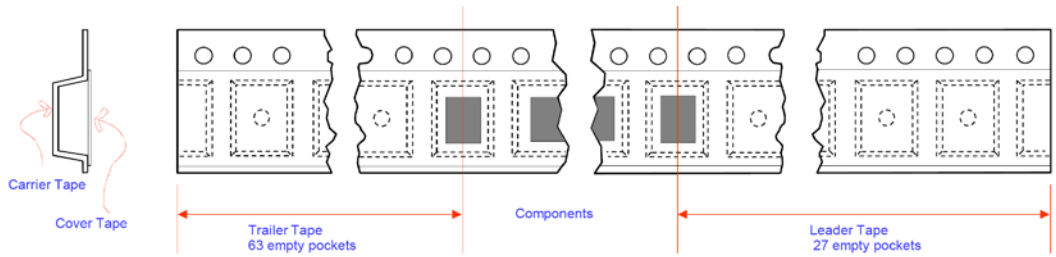
LAND PATTERN RECOMMENDATION

PACKAING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKGE	PACKING CODE	EA PER REEL	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON (pcs)	GROSS WEIGHT (KG)
MBS	T	3000	--	16	13	370*360*430	60K	--

Tape Leader and Trailer Configuration (standard):



REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES -MBS

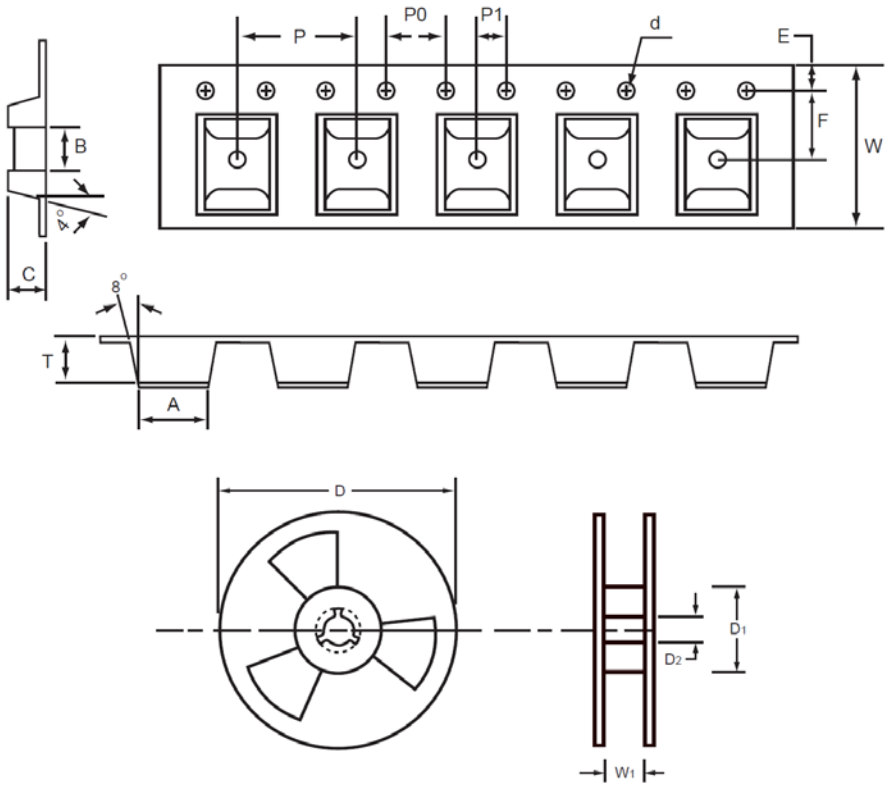


Fig.: Configuration of MINI DIP REEL TAPING

ITEM	SYMBOL	SPECIFICATIONS (mm)
Carrier width	A	5.0±0.1
Carrier length	B	3.2±0.1
Carrier depth	C	2.9±0.1
Sprocket hole	d	1.5±0.1/-0
Reel outside diameter	D	178±2.0
Reel inner diameter	D1	8.0±0.2
Feed hole diameter	D2	13±0.5
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.5
Punch hole pitch	P	8.0±0.1
Sprocket hole pitch	P0	4.0±0.1
Embossment center	P1	2.0±0.05
Overall tape thickness	T	2.65±0.1
Tape width	W	12.0+0.3/-0.1
Reel width	W1	16.8±2.0