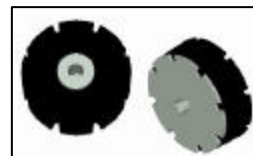


TECHNICAL DATA
DATA SHEET 546, REV. -

HIGH VOLTAGE, HIGH DENSITY, FAST RECOVERY MODULAR RECTIFIER ASSEMBLY

FEATURES:

- Up to 15kV reverse voltage
- Low reverse leakage current
- High thermal shock resistance
- Modular construction
- Provides design versatility
- $V_R = 2500V - 15000V$
- $I_F = 0.8 - 2.0A$ (air)
- $I_R = 1.0mA$
- $I_{FSM} = 50A$



Absolute Maximum Ratings

TYPE NUMBER	PEAK INVERSE VOLTAGE (PIV)	MAX. AVG. DC OUTPUT CURRENT (AIR) $I_{F(AV)}$ Amps		STUD TO HEAT- SINK @ 25°C	IN STILL OIL @ 55°C	1 CYCLE SURGE CURRENT I_{FSM} $t_p = 8.3ms$ Amps		REPETITIVE SURGE CURRENT I_{FRM} @ 25°C	I_t $t_p = 8.3ms$ @ 25°C
		Volts	25°C	100°C		25°C	100°C		
S2HVM2.5	2500		2.0	0.8	2.0				
S2HVM5	5000		2.0	0.8	2.0				
S2HVM7.5	7500		2.0	0.8	2.0	2.0			
S2HVM10	10000		1.2	0.5	2.0				
S2HVM12.5	12500		1.0	0.4	2.0				
S2HVM15	15000		0.8	0.3	1.5				

MAXIMUM THERMAL IMPEDANCES

Junction to Ambient	$R_{\theta JC} < 12^\circ C/W$
Junction to Stud	$R_{\theta JS} < 6^\circ C/W$
Junction to Oil	$R_{\theta JO} < 4.5^\circ C/W$

Electrical Characteristics

TYPE NUMBER	MAXIMUM REVERSE CURRENT @ PIV I_R μA		MAXIMUM PEAK FORWARD VOLTAGE V_F @ I_F @ 25°C		MAXIMUM REVERSE RECOVERY TIME ① t_{rr} @ 25°C μsec
	25°C	100°C	V	A	
S2HVM2.5			3.3		
S2HVM5			5.5		
S2HVM7.5	1.0	20	8.8	2.0	2.5
S2HVM10			11.1		
S2HVM12.5			14.4		
S2HVM15			16.6		

Notes:

- Operating temperature range -55 to +150°C.
- Storage temperature range -55 to +150°C.
- (Temperature range is given for Hermetic Diodes)
- ① Measured on discrete devices prior to assembly.

SENSITRON

TECHNICAL DATA

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Mechanical Dimensions in: mm / inches

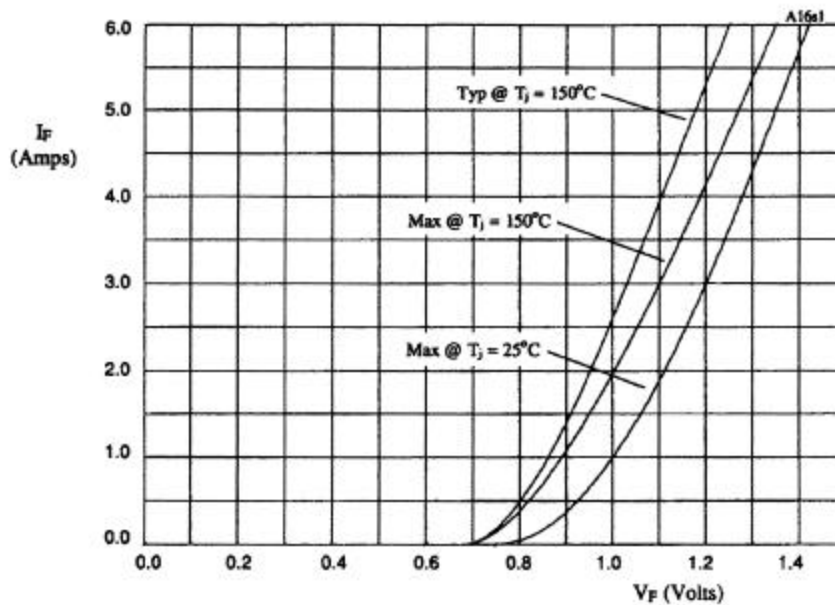
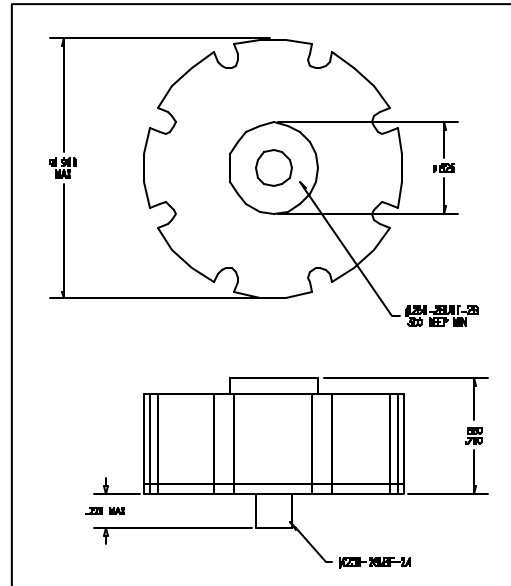


Figure 1. Forward voltage drop as a function of forward current for use with table 1.

TABLE 1

DEVICE	X-axis
S2HVM2.5	x3
S2HVM5	x5
S2HVM7.5	x8
S2HVM10	x10
S2HVM12.5	x13
S2HVM15	x15

S2HVM2.5	S2HVM10
S2HVM5	S2HVM12.5
S2HVM7.5	S2HVM15

SENSITRON

TECHNICAL DATA

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