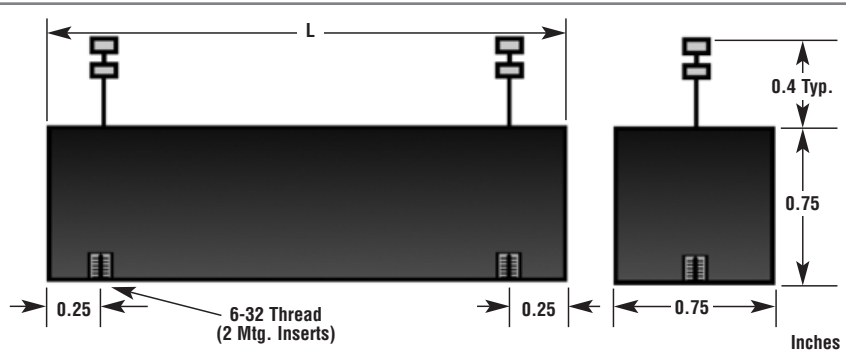




Rectifier Block



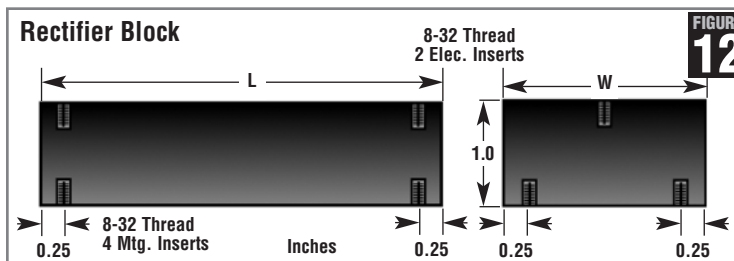
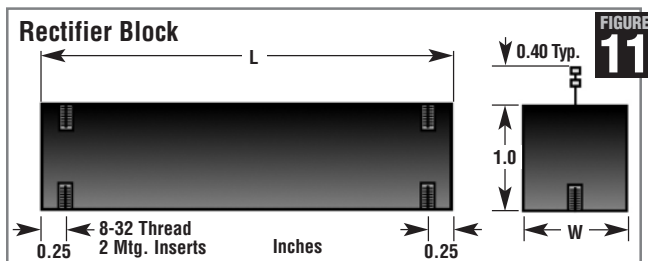
FIGURE 10



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg. Forward Current Max. $I_{FAVM@55^{\circ}C}$ A	Max. Forward Voltage Drop $V_F@I_{FAVM}$ V	Max. Reverse Current $I_R@V_{RRM@25^{\circ}C}$ μA	Max. Surge Current $I_{FSM}(8.3ms)$ A	Max. Reverse Recovery Time T_{RR} nS	Case L Inches
1HVK Series - Standard Recovery Block 1.0 Amp Glass Passivated Rectifier Assembly Figure 10							
1HV5K	5000	1.0	4.5	1.0	50	-	2.5
1HV8K	8000	1.0	7.2	1.0	50	-	3.5
1HV10K	10000	1.0	9.0	1.0	50	-	3.5
1HV15K	15000	1.0	14.0	1.0	50	-	5.0
1HV20K	20000	1.0	18.0	1.0	50	-	5.0
1HV25K	25000	0.75	22.0	1.0	50	-	6.0
1HV30K	30000	0.75	28.0	1.0	50	-	6.0
1HV40K	40000	0.75	36.0	1.0	50	-	7.0
1HV50K	50000	0.75	44.0	1.0	50	-	7.0
1HV60K	60000	0.75	56.0	1.0	50	-	7.0
1HVF Series - Fast Recovery Block 1.0 Amp Glass Passivated Rectifier Assembly T_{RR} 150nS Figure 10							
1HVF5K	5000	0.9	8.0	0.5	50	150	2.5
1HVF8K	8000	0.9	12.0	0.5	50	150	3.5
1HVF10K	10000	0.9	15.0	0.5	50	150	3.5
1HVF15K	15000	0.9	24.0	0.5	50	150	5.0
1HVF20K	20000	0.7	30.0	0.5	50	150	5.0
1HVF25K	25000	0.7	40.0	0.5	50	150	6.0
1HVF30K	30000	0.7	48.0	0.5	50	150	6.0
1HVF40K	40000	0.7	60.0	0.5	50	150	7.0
1HVF50K	50000	0.7	78.0	0.5	50	150	7.0
1HVUF Series - Ultra Fast Recovery Block 1.0 Amp Rectifier Assembly T_{RR} 75nS Figure 10							
1HVUF5K	5000	0.9	5.5	1.0	35	75	2.5
1HVUF8K	8000	0.9	8.8	1.0	35	75	3.5
1HVUF10K	10000	0.9	11.0	1.0	35	75	3.5
1HVUF15K	15000	0.9	17.0	1.0	35	75	5.0
1HVUF20K	20000	0.7	22.0	1.0	35	75	5.0
1HVUF25K	25000	0.7	28.0	1.0	35	75	6.0
1HVUF30K	30000	0.7	34.0	1.0	35	75	6.0
1HVUF40K	40000	0.7	44.0	1.0	35	75	7.0
1HVUF50K	50000	0.7	56.0	1.0	35	75	7.0
1HVFEK Series - Ultra Super Fast Recovery Block 1.0 Amp Fast Efficient Glass Passivated Rectifier Assembly T_{RR} 35nS Figure 10							
1HVFE3K	3000	1.0	15.0	1.0	50	35	5.0
1HVFE5K	5000	0.75	24.0	1.0	50	35	6.0
1HVFE10K	10000	0.75	48.0	1.0	50	35	7.0
1HVUSFK Series - Ultra Super Fast Recovery Block 1.0 Amp Rectifier Assembly T_{RR} 35nS Figure 10							
1HVUSF5K	5000	0.65	7.0	1.0	10	35	2.5
1HVUSF8K	8000	0.65	11.2	1.0	10	35	3.5
1HVUSF10K	10000	0.65	14.0	1.0	10	35	3.5
1HVUSF15K	15000	0.65	21.0	1.0	10	35	5.0
1HVUSF20K	20000	0.5	28.0	1.0	10	35	5.0
1HVUSF25K	25000	0.5	35.0	1.0	10	35	6.0
1HVUSF30K	30000	0.5	42.0	1.0	10	35	6.0
1HVUSF40K	40000	0.5	56.0	1.0	10	35	7.0
1HVUSF50K	50000	0.5	70.0	1.0	10	35	7.0

Available with resistor and capacitor or capacitor only compensation.

All listed products shipped on December 31, 2013 or later will be RoHS Compliant. Available earlier by special request, contact factory or sales rep for availability.



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg. Forward Current Max. $I_{FAVM@55^{\circ}C}$ A	Max. Forward Voltage Drop $V_F@I_{FAVM}$ V	Max. Reverse Current $I_R@V_{RRM}@25^{\circ}C$ μA	Max. Surge Current $I_{FSM}(8.3ms)$ A	Max. Reverse Recovery Time T_{RR} nS	Case Dimension LxW Inches	Figure
2HUSF K Series - Ultra Super Fast Recovery Block 2.0 Amp Rectifier Assembly T_{RR} 40nS								
2HUSF5K	5000	2.0	10.0	5.0	60	40	4.0x1.0	11
2HUSF8K	8000	1.75	16.0	5.0	60	40	6.0x1.0	11
2HUSF10K	10000	1.5	20.0	5.0	60	40	7.0x1.0	11
2HUSF15K	15000	1.5	30.0	5.0	60	40	4.0x2.0	12
2HUSF20K	20000	1.25	40.0	5.0	60	40	6.0x2.0	12
2HUSF25K	25000	1.25	50.0	5.0	60	40	8.0x2.0	12
2HUSF30K	30000	1.25	60.0	5.0	60	40	4.0x3.0	12
2HUSF40K	40000	1.25	80.0	5.0	60	40	8.0x3.0	12
2HUSF50K	50000	1.25	100.0	5.0	60	40	6.0x4.0	12
3HV K Series - Standard Recovery Block 3.0 Amp Glass Passivated Rectifier Assembly								
3HV5K	5000	3.0	4.8	0.5	150	-	4.0x1.0	11
3HV8K	8000	2.75	7.5	0.5	150	-	6.0x1.0	11
3HV10K	10000	2.5	9.0	0.5	150	-	7.0x1.0	11
3HV15K	15000	2.5	14.0	0.5	150	-	4.0x2.0	12
3HV20K	20000	2.25	18.0	0.5	150	-	6.0x2.0	12
3HV25K	25000	2.25	22.0	0.5	150	-	8.0x2.0	12
3HV30K	30000	2.25	28.0	0.5	150	-	4.0x3.0	12
3HV40K	40000	2.25	36.0	0.5	150	-	8.0x3.0	12
3HV50K	50000	2.25	44.0	0.5	150	-	6.0x4.0	12
3HVF K Series - Fast Recovery Block 3.0 Amp Glass Passivated Rectifier Assembly T_{RR} 250nS								
3HVF5K	5000	2.5	7.0	0.5	100	250	4.0x1.0	11
3HVF8K	8000	2.5	11.0	0.5	100	250	6.0x1.0	11
3HVF10K	10000	2.5	13.0	0.5	100	250	7.0x1.0	11
3HVF15K	15000	2.25	22.0	0.5	100	250	4.0x2.0	12
3HVF20K	20000	2.25	26.0	0.5	100	250	6.0x2.0	12
3HVF25K	25000	2.25	34.0	0.5	100	250	8.0x2.0	12
3HVF30K	30000	2.25	40.0	0.5	100	250	4.0x3.0	12
3HVF40K	40000	2.25	52.0	0.5	100	250	8.0x3.0	12
3HVF50K	50000	2.25	68.0	0.5	100	250	6.0x4.0	12
3HUF K Series - Ultra Fast Recovery Block 3.0 Amp Rectifier Assembly T_{RR} 75nS								
3HUF5K	5000	3.0	7.0	5.0	150	75	4.0x1.0	11
3HUF8K	8000	2.75	11.0	5.0	150	75	6.0x1.0	11
3HUF10K	10000	2.5	14.0	5.0	150	75	7.0x1.0	11
3HUF15K	15000	2.5	21.0	5.0	150	75	4.0x2.0	12
3HUF20K	20000	2.25	28.0	5.0	150	75	6.0x2.0	12
3HUF25K	25000	2.25	35.0	5.0	150	75	8.0x2.0	12
3HUF30K	30000	2.25	42.0	5.0	150	75	4.0x3.0	12
3HUF40K	40000	2.25	56.0	5.0	150	75	8.0x3.0	12
3HUF50K	50000	2.25	70.0	5.0	150	75	6.0x4.0	12
6HV K Series - Standard Recovery Block 6.0 Amp Rectifier Assembly								
6HV5K	5000	3.5	5.0	5.0	400	-	4.0x1.0	11
6HV8K	8000	3.25	8.0	5.0	400	-	6.0x1.0	11
6HV10K	10000	3.0	10.0	5.0	400	-	7.0x1.0	11
6HV15K	15000	3.0	15.0	5.0	400	-	4.0x2.0	12
6HV20K	20000	2.75	20.0	5.0	400	-	6.0x2.0	12
6HV25K	25000	2.5	25.0	5.0	400	-	8.0x2.0	12
6HV30K	30000	2.5	30.0	5.0	400	-	4.0x3.0	12
6HV40K	40000	2.5	40.0	5.0	400	-	8.0x3.0	12
6HV50K	50000	2.5	50.0	5.0	400	-	6.0x4.0	12
6HVF K Series - Fast Recovery Block 6.0 Amp Rectifier Block T_{RR} 350nS								
6HVF5K	5000	3.0	6.0	5.0	200	350	4.0x1.0	11
6HVF8K	8000	2.75	9.6	5.0	200	350	6.0x1.0	11
6HVF10K	10000	2.5	12.0	5.0	200	350	7.0x1.0	11
6HVF15K	15000	2.5	18.0	5.0	200	350	4.0x2.0	12
6HVF20K	20000	2.25	24.0	5.0	200	350	6.0x2.0	12
6HVF25K	25000	2.0	30.0	5.0	200	350	8.0x2.0	12
6HVF30K	30000	2.0	36.0	5.0	200	350	4.0x3.0	12
6HVF40K	40000	2.0	48.0	5.0	200	350	8.0x3.0	12
6HVF50K	50000	2.0	60.0	5.0	200	350	6.0x4.0	12

8-32 female inserts standard. Add "T" to end of part number for solder terminals. Available with resistor and capacitor or capacitor only compensation.

All listed products shipped on December 31, 2013 or later will be RoHS Compliant. Available earlier by special request, contact factory or sales rep for availability.



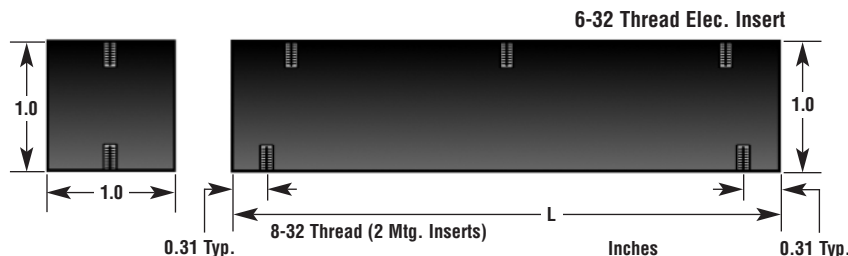
Part Number	Repetitive Peak Reverse Voltage V_{RRM} Per Leg V	Average Forward Current Max. $I_{FAVM}@55^{\circ}\text{C}$ A	Maximum Forward Voltage Drop $V_F@I_F$ Per Leg V	Maximum Reverse Current $I_R@V_{RRM}@25^{\circ}\text{C}$ μA	Maximum Surge Current I_{FSM} (8.3ms) A	Case Length L Inches
3HV RC Series - Resistor-Capacitor Compensated 3.0 Amp Glass Passivated Rectifier Assembly						Figure 16
3HV3RC	3000	1.75	2.4	500	150	2.38
3HV5RC	5000	1.75	4.8	500	150	2.38
3HV8RC	8000	1.75	7.5	500	150	2.38
3HV10RC	10000	1.75	9.0	500	150	4.50
3HV12RC	12000	1.75	10.8	500	150	4.50
3HV15RC	15000	1.75	14.0	500	150	5.50
3HV20RC	20000	1.75	18.0	500	150	7.00
3HV25RC	25000	1.75	22.0	500	150	8.25
3HV30RC	30000	1.75	28.0	500	150	10.25
3HV40RC	40000	1.75	36.0	500	150	13.25
3HV50RC	50000	1.75	44.0	500	150	16.25
3HV75RC	75000	1.75	69.0	500	150	25.00
6HV RC Series - Resistor-Capacitor Compensated 6.0 Amp Rectifier Assembly						Figure 16
6HV3RC	3000	2.0	3.0	500	400	3.25
6HV5RC	5000	2.0	5.0	500	400	3.25
6HV8RC	8000	2.0	8.0	500	400	3.25
6HV10RC	10000	2.0	10.0	500	400	5.50
6HV12RC	12000	2.0	12.0	500	400	5.50
6HV15RC	15000	2.0	15.0	500	400	7.00
6HV20RC	20000	2.0	20.0	500	400	10.25
6HV25RC	25000	2.0	25.0	500	400	13.25
6HV30RC	30000	2.0	30.0	500	400	16.25
6HV40RC	40000	2.0	40.0	500	400	25.00
6HV50RC	50000	2.0	50.0	500	400	25.00
3HV•RC Series - Resistor-Capacitor Compensated 3.0 Amp Glass Passivated Rectifier Center Tap and Doubler Assembly						Figure 16
3HV•5RC	5000	3.5	4.8	500	150	4.50
3HV•8RC	8000	3.5	7.5	500	150	5.50
3HV•10RC	10000	3.5	9.0	500	150	7.00
3HV•12RC	12000	3.5	10.8	500	150	8.25
3HV•15RC	15000	3.5	14.0	500	150	10.25
3HV•20RC	20000	3.5	18.0	500	150	13.25
3HV•25RC	25000	3.5	23.0	500	150	16.25
6HV•RC Series - Resistor-Capacitor Compensated 6.0 Amp Rectifier Center Tap and Doubler Assembly						Figure 16
6HV•5RC	5000	4.0	5.0	500	400	5.5
6HV•8RC	8000	4.0	8.0	500	400	8.25
6HV•10RC	10000	4.0	10.0	500	400	10.25
6HV•12RC	12000	4.0	12.0	500	400	13.25
6HV•15RC	15000	4.0	15.0	500	400	13.25
6HV•20RC	20000	4.0	20.0	500	400	25.00
6HV•25RC	25000	4.0	25.0	500	400	25.00

FIGURE 16

Resistor-Capacitor Compensated High Voltage Rectifier Block

Please Note: For Solder Turrets Add Suffix "T" For Mounting Studs Add Suffix "S"

3 HV•RC and 6HV•RC Center Tap and Doubler Assemblies



Where • appears in the part number, substitute the letter N, P or D for the appropriate assembly configuration.
i.e. 3HGD5 is a 5kV, 2.5A doubler

Please Note:

Different circuit arrangements are identified by using a **Circuit Code Letter.**

P=Positive Center Tap

N=Negative Center Cap

D=Doubler

Positive Center Tap (HGP)

Positive Center Tap 2.0A, 10000V/LE 3HVP5RC

Negative Center Tap (HGN)

Negative Center Tap 1.6A, 25000V/LE 3HVN5RC

Doubler (3HGD)

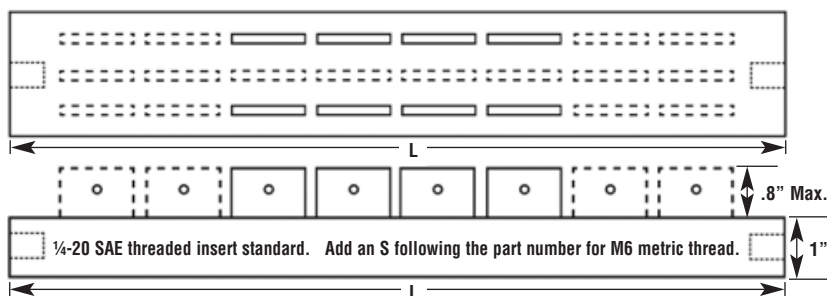
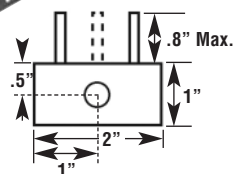
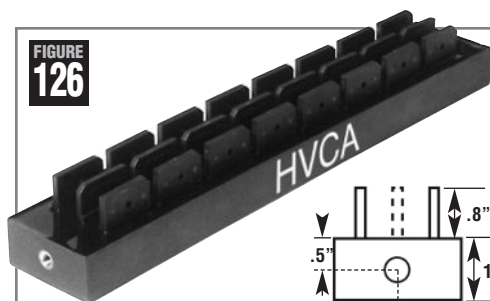
(I_{FAVM} of Doubler is $I_{FAVM} \times 0.5$)
Doubler 2.0A, 15000V/LE 3HVD5RC

Available with capacitor only compensation or no compensation.

All listed products shipped on December 31, 2013 or later will be RoHS Compliant. Available earlier by special request, contact factory or sales rep for availability.



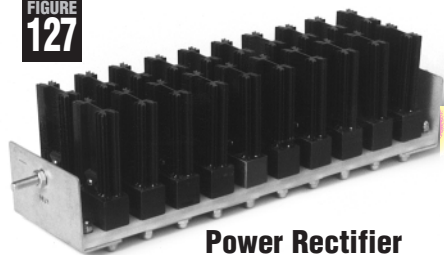
FIGURE 126



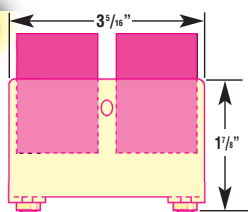
Note: Items with dashed outline may not be present in some part numbers

Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg. Maximum Forward Current Still Air @T _A =35°C A	Avg. Maximum Forward Current Forced Air @T _A =55°C A	Avg. Maximum Forward Current Forced Air @T _A =35°C ¹ A	Avg. Maximum Forward Current Forced Air @T _A =55°C ¹ A	Max. Forward Voltage Drop@25°C $V_F@I_F=12A$ V	Max. Surge Current $I_{FSM}(8.3ms)$ A	Max. Reverse Current $I_R@V_{RRM}25°C/100°C$ nS	Package Length L Inches	Figure
HVHP Series - High Current Diode Standard Recovery										
HVHP7K	7200	4.2	3.5	12	10	12	600	400/600	6.5	126
HVHP10K	10800	3.2	2.6	12	10	18	600	400/600	6.5	126
HVHP19K	19200	2.6	2.0	10	8.4	32	600	400/600	12.5	126
HVHP29K	29000	2	1.4	9	7.5	48	600	400/600	12.5	126

FIGURE 127

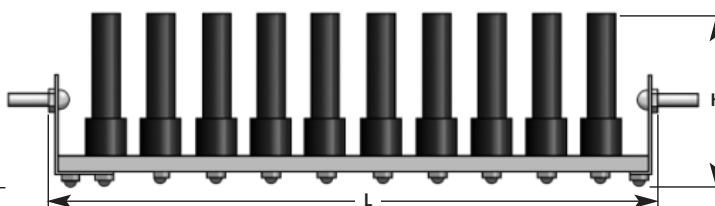


Power Rectifier Assembly
Capacitor Compensated



Complete Replacement For:

Philips Amperex RS3.5, RS5, RS10, OSB-, OSM-, OSS-, 9115, 9215, 9415



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg. Maximum Forward Current 50°C I_{FAVM}^2 A	Avg. Maximum Forward Current 50°C I_{FAVM}^3 A	Max. Forward Voltage Drop@25°C $V_F@I_F=5.0A$ V	Max. Surge Current $I_{FSM}@10ms$ A	Max. Reverse Current $I_R@V_{RRM}@25°C$ μA	Package Length L Inches	Figure
HRS5 Series - Power Rectifier Standard Recovery							H = 3.25 Inches	
HRS5-6	9600	5	15	6	400	100	4.8	127
HRS5-9	16000	5	15	10	400	100	7.0	127
HRS5-12	19200	5	15	12	400	100	8.15	127
HRS5-15	25600	5	15	16	400	100	10.4	127
HRS5-18	28800	5	15	18	400	100	11.5	127
HRS5-21	32000	5	15	20	400	100	12.62	127
HRS5-24	38400	5	15	24	400	100	14.85	127
HRS5-27	41600	5	15	26	400	100	16	127
HRS5-30	48000	5	15	30	400	100	18.2	127
HRS10 Series - Power Rectifier Standard Recovery							H = 3.75 Inches	
HRS10-6	9600	10	25	6	950	100	4.8	127
HRS10-9	16000	10	25	10	950	100	7.0	127
HRS10-12	19200	10	25	12	950	100	8.15	127
HRS10-15	25600	10	25	16	950	100	10.4	127
HRS10-18	28800	10	25	18	950	100	11.5	127
HRS10-21	32000	10	25	20	950	100	12.62	127
HRS10-24	38400	10	25	24	950	100	14.85	127
HRS10-27	41600	10	25	26	950	100	16	127
HRS10-30	48000	10	25	30	950	100	18.2	127

For HRS series, add an S after the part number for M6-35 Studs instead of 1/4-28 - 1" studs which are standard. Fast recovery available.

¹ Ratings valid with 700 lfpm of air at 35°C to 55°C with the case mounted to a proper heatsink and the air flow directed on the device.

² The current ratings in this column are for devices operated with convective cooling only. Ambient air temperature of 50°C or below.

³ The current ratings in this column are for devices operated with forced air cooling. Air flow must equal or exceed 300 linear feet per minute flow with an ambient air temperature of 50°C or below.

Maximum operating and storage temperature -55°C to 125°C

All listed products shipped on December 31, 2013 or later will be RoHS Compliant. Available earlier by special request, contact factory or sales rep for availability.