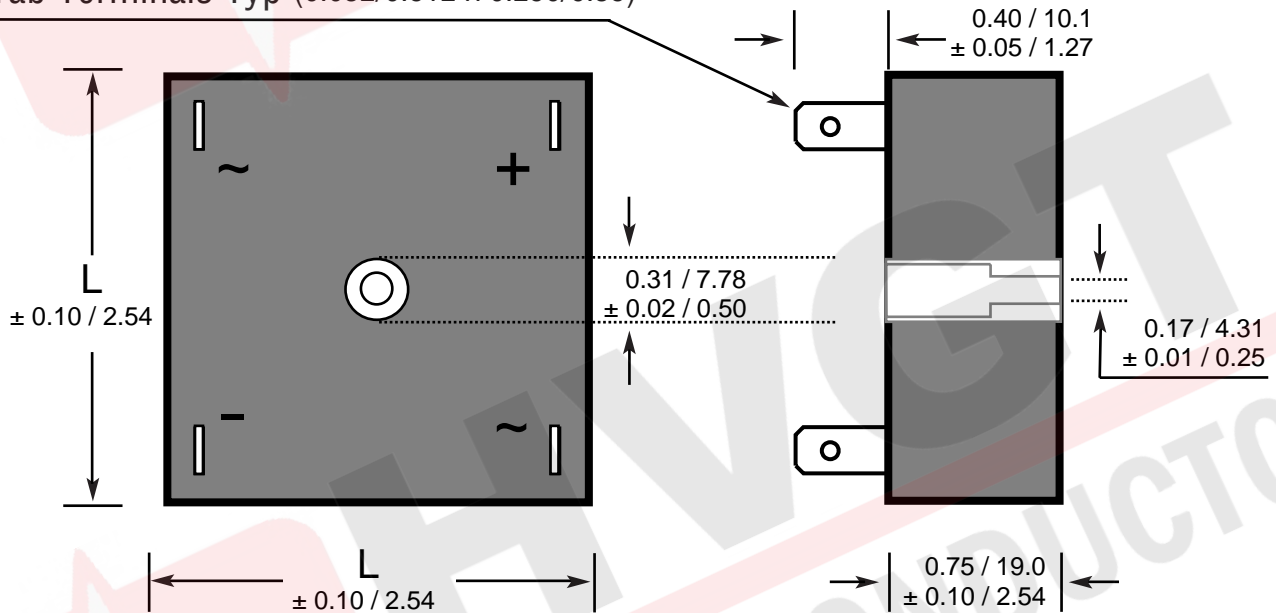


Tab Terminals Typ (0.032/0.812 x 0.250/6.35)



Inches/mm

# HVQL 20 FR 10K E

About weight:

HVQL=	10=1.0A	SR=	05K=5.0KV	Inches/mm	(g / piece)
High voltage	20=2.0A	Standard Recovery	08K=8.0KV	C=1.5 / 38.1	50.0/g
bridge rectifier	30=3.0A	FR=	10K=10KV	D=2.0 / 50.8	90.0/g
Series	40=4.0A	Fast Recovery	15K=15KV	E=2.5 / 63.5	138.0/g
	50=5.0A	UF=	20K=20KV		
		Ultra Fast Recovery			
		US=			
		Ultra Super Fast Recovery			

Note: All current ratings require assembly on suitably engineered heat sink, using a quality heat coupling compound.

HVGT Part Number	Repetitive Peak Reverse Voltage $V_{RRM}$ (Per Leg) kV	Avg. Forward Current Max. $I_{FAVM}$ @ $T_C=55^\circ C$ A	Max. Forward Voltage Drop $V_F$ @ $0.5I_{FAVM}$ (Per Leg) V	Max. Reverse Current $I_R$ @ $V_{RRM}$ @ $25^\circ C$ uA	Max. Surge Current $I_{FSM}$ (8.3ms) A	Max. Reverse Recovery Time $T_{RR}$ nS	Case Length L Inches/mm
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### Standard Recovery 2.0 and 5.0 Amp Glass Passivated Rectifiers

HVQL20SR05KC	5.0	2.0	4.8	0.5	50	--	1.5 / 38.1
HVQL20SR08KC	8.0	2.0	7.2	0.5	50	--	1.5 / 38.1
HVQL20SR10KC	10.0	2.0	8.4	0.5	50	--	1.5 / 38.1
HVQL20SR15KE	15.0	2.0	12.0	0.5	50	--	2.5 / 63.5
HVQL20SR20KE	20.0	2.0	18.0	0.5	50	--	2.5 / 63.5
HVQL50SR05KD	5.0	5.0	5.2	0.5	150	--	2.0 / 50.8
HVQL50SR08KD	8.0	5.0	7.2	0.5	150	--	2.0 / 50.8
HVQL50SR10KE	10.0	5.0	10.4	0.5	150	--	2.5 / 63.5
HVQL50SR15KE	15.0	5.0	13.0	0.5	150	--	2.5 / 63.5

### Fast Recovery 1.0 and 5.0 Amp Glass Passivated Rectifiers

HVQL10FR05KC	5.0	1.0	7.2	0.5	30	150	1.5 / 38.1
HVQL10FR10KC	10.0	1.0	14.4	0.5	30	150	1.5 / 38.1
HVQL20FR05KD	5.0	2.0	6.5	0.5	50	150	2.0 / 50.8
HVQL20FR08KD	8.0	2.0	10.4	0.5	50	150	2.0 / 50.8
HVQL20FR10KE	10.0	2.0	13.0	0.5	50	150	2.5 / 63.5
HVQL20FR15KE	15.0	2.0	20.0	0.5	50	150	2.5 / 63.5
HVQL40FR05KD	5.0	4.0	7.0	0.5	100	150	2.0 / 50.8
HVQL40FR08KE	8.0	4.0	11.2	0.5	100	150	2.5 / 63.5
HVQL40FR10KE	10.0	4.0	14.0	0.5	100	150	2.5 / 63.5
HVQL50FR05KE	5.0	5.0	7.5	0.5	120	150	2.5 / 63.5
HVQL50FR08KE	8.0	5.0	12.0	0.5	120	150	2.5 / 63.5

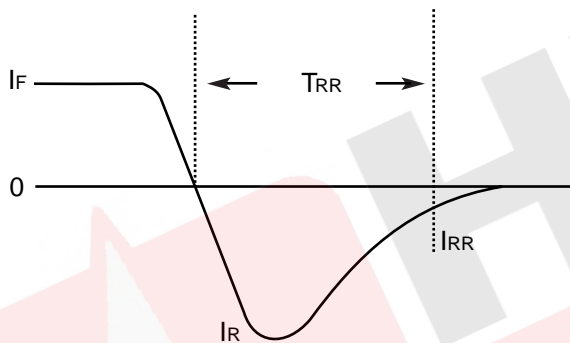
### Ultra Fast Recovery 2.0 and 4.0 Amp Rectifiers ( $T_{RR}$ 75 nS)

HVQL20UF05KC	5.0	2.0	8.0	1.0	50	75	1.5 / 38.1
HVQL20UF08KC	8.0	2.0	12.8	1.0	50	75	1.5 / 38.1
HVQL20UF10KD	10.0	2.0	16.0	1.0	50	75	2.0 / 50.8
HVQL20UF15KE	15.0	2.0	24.0	1.0	50	75	2.5 / 63.5
HVQL20UF20KE	20.0	2.0	32.0	1.0	50	75	2.5 / 63.5
HVQL40UF05KD	5.0	4.0	7.0	2.0	150	75	2.0 / 50.8
HVQL40UF08KD	8.0	4.0	11.2	2.0	150	75	2.0 / 50.8
HVQL40UF10KE	10.0	4.0	14.0	2.0	150	75	2.5 / 63.5
HVQL40UF15KE	15.0	4.0	21.0	2.0	150	75	2.5 / 63.5

### Ultra Super Fast Recovery 1.0 and 3.0 Amp Rectifiers ( $T_{RR}$ 40 nS)

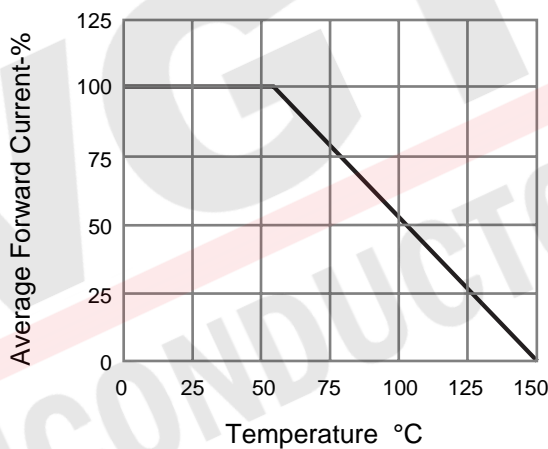
HVQL10US05KC	5.0	1.0	7.0	1.0	20	40	1.5 / 38.1
HVQL10US08KC	8.0	1.0	11.2	1.0	20	40	1.5 / 38.1
HVQL10US10KD	10.0	1.0	14.0	1.0	20	40	2.0 / 50.8
HVQL10US15KE	15.0	1.0	21.0	1.0	20	40	2.5 / 63.5
HVQL10US20KE	20.0	1.0	28.0	1.0	20	40	2.5 / 63.5
HVQL30US05KD	5.0	3.0	10.0	2.0	60	40	2.0 / 50.8
HVQL30US08KD	8.0	3.0	16.0	2.0	60	40	2.0 / 50.8
HVQL30US10KE	10.0	3.0	20.0	2.0	60	40	2.5 / 63.5
HVQL30US15KE	15.0	3.0	30.0	2.0	60	40	2.5 / 63.5

**FIGURE 01** Reverse Recovery Measurement Waveform



Typical data capture points:  $I_F = 0.5I_R$  ,  $I_R, I_{RR} = 0.25I_R$   
 $I_R$  is typically the rated average forward current maximum ( $I_{FAVM}$ ) of the D.U.T.

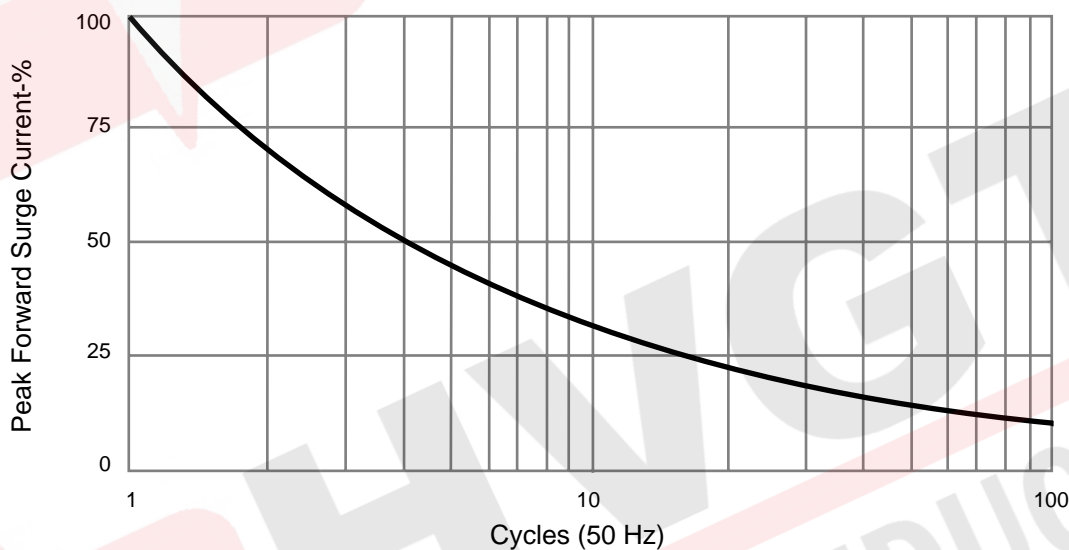
**FIGURE 02** Forward Current Derating Curve



This applies to most diodes in our catalog that show average current rating at 55°C unless otherwise specified.

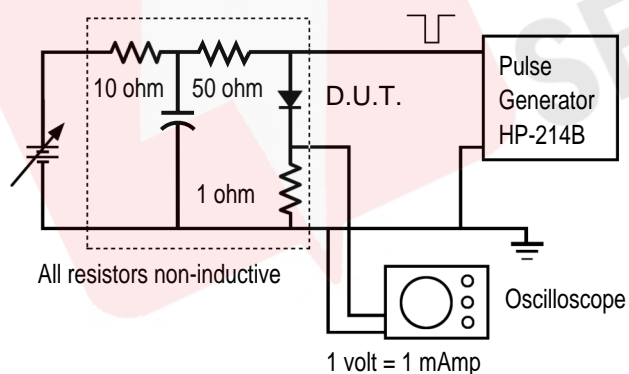
Max operating temperature is 150°C unless otherwise specified.

**FIGURE 03** Repetitive Surge Current Derating Curve



This curve represents the percentage of published maximum surge rating as a function of surge repetition.

**FIGURE 04** Typical  $T_{RR}$  Setup for Higher Current Diodes



**FIGURE 05** Typical  $T_{RR}$  Setup for Lower Current Diodes

