



HVCF Series

2.5KV-10KV, High Forward Surge, Fast Recovery, High Voltage Diode

Features

- High current, fast recovery, silicon diode.
- Molded plastic body, ANSI/UL94 V-0 rated material.
- RoHS compliant to Directive 2011/65/EC, Article 4(1), Annex II, Annex III, 7(a) and EU RoHS Directive (EU) 2015/863 of March 2015, Amending Annex II



DEVICE ELECTRICAL CHARACTERISTICS

(25°C ambient temperature unless stated otherwise)

	Conditions	Symbol	HVCF25	HVCF50	HVCF100
Maximum Repetitive Peak Reverse Volt.	-	V_{RRM}	2500 V	5000 V	10000 V
Average Forward Current Maximum	$T_A = 55^\circ\text{C}$	I_{FAVM}	1.5 A	1.2 A	0.65 A
Average Forward Current Maximum	$*T_L = 55^\circ\text{C}$	I_{FAVM}	3.0 A	2.2 A	1.5 A
Maximum Forward Voltage Drop	$I_F = I_{FAVM(TL)}$	V_F	4.3 V	7.0 V	10.7 V
Maximum Surge Current Rating	8.3msec, half sine	I_{FSM}	200 A	150 A	100 A
Maximum Reverse Current	at rated V_{RRM}	I_R	2.0 μA		
Maximum Reverse Recovery Time	$I_F = 0.5\text{A}; I_R = -1.0\text{A}; I_{rr} = -0.25\text{A}$	T_{RR}	75 nsec		
Typical Junction Capacitance	$f = 1\text{MHz}, V_r = 0\text{VDC}$	C_J	65 pf	45 pf	24 pf
Maximum Junction Temperature	-	T_J	175°C	150°C	
Storage Temperature Range	-	T_{STG}	-55°C to 175°C		

*Temperature measured at lead egress; lead length = 9.5mm

MECHANICAL DATA

		Min.		Max.	
		in.	mm	in.	mm
Body Length	A	-	-	0.38	9.65
Body Diameter	D	-	-	0.32	8.13
Lead Length	B	0.600	15.2	-	-
Lead Diameter	C	-	-	0.080	2.0

