

FAST RECOVERY HIGH VOLTAGE DIODE ASSEMBLIES, Model Series FDA

Preliminary Data Sheet

Parameter	Symbol	Condition/Comment	FDA 100-75	FDA 100-150	FDA 160-75	FDA 160-150	FDA 200-75	FDA 200-150	FDA 240-75	FDA 240-150	FDA 300-75	FDA 300-150	FDA 320-75	FDA 320-150	Unit
Max. Peak Repetitive Reverse Voltage	$V_{RR(max)}$	$T_{case} = 25^{\circ}C, I_R < 100 \mu A$	10	10	16	16	20	20	24	24	30	30	32	32	kVDC
Max. Working Peak Reverse Voltage	$V_{RW(max)}$	$T_{case} = 25^{\circ}C, I_R < 100 \mu A$	10	10	16	16	20	20	24	24	30	30	32	32	kVDC
DC Blocking Voltage	$V_{R(max)}$	$T_{case} = 25^{\circ}C, I_R < 100 \mu A$	10	10	16	16	20	20	24	24	30	30	32	32	kVDC
Maximum Average Forward Current	$I_{FAV(max)}$	$T_{case} < 25^{\circ}C$ (cooling option 04 required)	75	150	75	150	75	150	75	150	75	150	75	150	ADC
Maximum Repetitive Peak Current	$I_{P(max)}$	$t_p < 10 \mu s, dc < 1\%, T_{case} < 25^{\circ}C$	750	1500	750	1500	750	1500	750	1500	750	1500	750	1500	ADC
Max. Nonrepetitive Peak Surge Current	I_{FSM}	$t_p < 8.3 ms, sine halfwave, T_{case} < 25^{\circ}C$	500	1000	500	1000	500	1000	500	1000	500	1000	500	1000	ADC
Maximum Continuous Power Dissipation	$P_{d(max)}$	$T_{case} < 25^{\circ}C$, standard plastic case	10	12	12	14	15	18	17	21	23	28	24	29	Watt
Maximum Operating Temperature Range	T_O	Extended range on request	- 50...+85												$^{\circ}C$
Typical Instantaneous Forward Voltage	V_F	$t_p < 10 \mu s, T_{case} = 25^{\circ}C, @ I_{FAV(max)}$	27		42		51		60		75		81		VDC
		$t_p < 10 \mu s, T_{case} = 25^{\circ}C, @ I_{P(max)}$	54		84		102		120		150		162		
Typical Reverse Blocking Current	I_R	$T_{case} = 25^{\circ}C, @ 0.95 \times V_{R(max)}$	1												μADC
		$T_{case} = 85^{\circ}C, @ 0.95 \times V_{R(max)}$	10												
Typical Reverse Recovery Time	t_{rr}	@ $0.1 \times I_{FAV(max)}, di/dt = 100A/\mu s$	60												ns
		@ $I_{FAV(max)}, di/dt = 100A/\mu s$	85												
		@ $I_{P(max)}, di/dt = 100A/\mu s$	200												
Module Dimension (PCB versions)	LxWxH	Without optional cooling fins	83x34x30		83x34x30		100x34x30		115x34x30		140x34x30		150x34x30		mm^3
Weight		Without optional cooling fins	140	180	175	220	225	270	245	310	300	380	315	405	g