

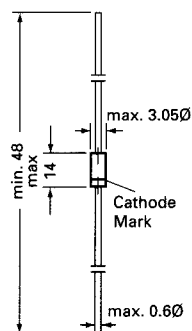
DD300...DD1800

FAST RECOVERY HIGH VOLTAGE SILICON RECTIFIERS

Fast Recovery High Voltage Silicon Rectifiers

Nominal current 20mA
 Repetitive peak reverse voltage 3000 to 18000V

Higher Voltage upon requested



Plastic case

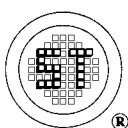
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Type	Reptitive peak reverse voltage V_{RRM} V	Nominal current I_{FAV} mA	Cathode Mark	Surge peak reverse voltage V_{RSM}
DD 300	3000	20	white	4000
DD 600	6000	20	brown	7000
DD 1000	10000	20	blue	12000
DD 1200	12000	20	silver	14000
DD 1400	14000	20	yellow	15500
DD 1600	16000	20	green	19000
DD 1800	18000	20	red	20000

	Symbol	Value	Unit
Nominal current, half wave rectification $T_A = 45^\circ\text{C}$	I_{FAV}	20	mA ¹⁾
Repetitive peak forward current	I_{FRM}	300	mA
Surge current, half cycle 50Hz sine wave, starting from $T_j = 25^\circ\text{C}$	I_{FSM}	5	A
Junction temperature	T_j	150	$^\circ\text{C}$
Operating temperature	T_A	-55 to + 150	$^\circ\text{C}$
Storage temperature	T_s	-55 to + 150	$^\circ\text{C}$

¹⁾ Valid provided if leads are kept at ambient temperature at a distance of 8 mm from case.



SEMTECH ELECTRONICS LTD.
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DD300...DD1800

FAST RECOVERY HIGH VOLTAGE SILICON RECTIFIERS

Characteristics

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage $I_F = 10\text{ mA}$, $T_J = 25\text{ }^{\circ}\text{C}$	V_F	-	-	<40	V
Leakage Current at V_{RRM} $T_J = 25\text{ }^{\circ}\text{C}$	I_R	-	-	<1	μA
Reverse Recovery Time from $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}$	t_{rr}	-	-	<55	ns
Thermal Resistance Junction to Ambient Air	T_{thA}	-	-	<60	$\text{K/W}^{(1)}$

