

RECTIFIER DIODES

- STANDARD RECTIFIER
- HIGH SURGE CURRENT CAPABILITY
- LOW FORWARD VOLTAGE DROP


ABSOLUTE MAXIMUM RATINGS (limiting values)

Symbol	Parameter	Value	Unit
$I_{F(AV)}$	Average forward current *	$T_c=150^{\circ}\text{C}$ 6	A
I_{FSM}	Surge non repetitive forward current	$t_p=10\text{ms}$ sinusoidal 450	A
P_{tot}	Power dissipation *	$T_c=150^{\circ}\text{C}$ 25	W
T_{stg} T_j	Storage and junction temperature range	- 55 to + 175	$^{\circ}\text{C}$

* Single phase, half wave, resistive or inductive load.

Symbol	Parameter	1N							Unit
		1344B	1345B	1346B	1347B	1348B	3988	3990	
V_{RRM}	Repetitive peak reverse voltage	200	300	400	500	600	800	1000	V

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case	3.5	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
V_F *	$T_j = 25^{\circ}\text{C}$	$I_F = 20\text{ A}$			1.2	V
I_R **	$T_j = 150^{\circ}\text{C}$	$V_R = V_{RRM}$			500	μA

Pulse test : * $t_p = 380\ \mu\text{s}$, duty cycle < 2 %

** $t_p = 5\ \text{ms}$, duty cycle < 2 %