

RECTIFIER DIODES

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


 DO5
 (Metal)

ABSOLUTE MAXIMUM RATINGS (limiting values)

Symbol	Parameter		Value	Unit
$I_{F(AV)}$	Average forward current *	$T_c=140^\circ\text{C}$	40	A
I_{FSM}	Surge non repetitive forward current	$t_p=10\text{ms}$ sinusoidal	700	A
P_{tot}	Power dissipation *	$T_c=140^\circ\text{C}$	44	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
		1186	1187	1188	1189	1190	3766	3768	
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		0.8	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS

Symbol	Test Conditions			Min.	Typ.	Max.	Unit
V_F *	$T_j = 25^\circ\text{C}$	$I_F = 110 \text{ A}$				1.5	V
I_R **	$T_j = 150^\circ\text{C}$	$V_R = V_{RRM}$				5	mA

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

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