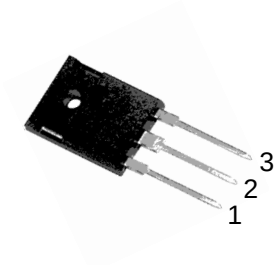
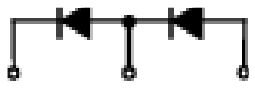
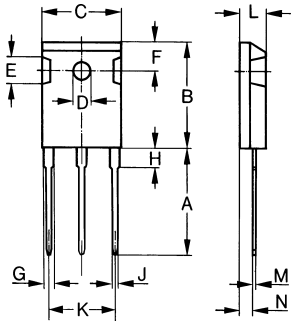
SDD25

Discrete Diodes





Dimensions TO-247AD



Dim.	Millimeter Min.	Max.	Inches Min.	Max.
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.610	0.640
D	3.55	3.65	0.140	0.144
E	4.32	5.49	0.170	0.216
F	5.4	6.2	0.212	0.244
G	1.65	2.13	0.065	0.084
H	-	4.5	-	0.177
J	1.0	1.4	0.040	0.055
K	10.8	11.0	0.426	0.433
L	4.7	5.3	0.185	0.209
M	0.4	0.8	0.016	0.031
N	1.5	2.49	0.087	0.102

	V_{RSM} V	V_{RRM} V
SDD25N01	50	50
SDD25N02	100	100
SDD25N03	200	200
SDD25N04	400	400
SDD25N05	600	600
SDD25N06	800	800
SDD25N07	1000	1000

Symbol	Test Conditions		Maximum Ratings	Unit
I_{FRMS}	$T_{VJ}=T_{VJM}$		43	A
$I_{F(AV)M}$	$T_C=100^oC$; 180° sine		25	
I_{FSM}	$T_{VJ}=45^oC$;	t=10ms (50Hz), sine	300	A
	V_R =0V;	t=8.3ms (60Hz), sine	330	
	$T_{VJ}=150^oC$;	t=10ms(50Hz), sine	270	
	V_R =0V;	t=8.3ms(60Hz), sine	300	
I^2t	$T_{VJ}=45^oC$;	t=10ms (50Hz), sine	450	A^2s
	V_R =0V;	t=8.3ms (60Hz), sine	450	
	$T_{VJ}=150^oC$;	t=10ms(50Hz), sine	340	
	V_R =0V;	t=8.3ms(60Hz), sine	325	
T_{VJ}			-40...+180	°C
T_{VJM}			180	
T_{stg}			-40...+150	
M_d	Mounting torque		0.8...1.2	Nm
F_C	Mounting force with clip		20...120	N
V_{ISOL}	50/60Hz, RMS, t=1minute, leads-to-tab		2500	V~
Weight			6	g

Symbol	Test Conditions		Characteristic Values	Unit
I_R	$T_{VJ}=150^oC$; $V_R=V_{RRM}$		≤ 2	mA
V_F	I_F=55A; $T_{VJ}=25^oC$		≤ 1.6	V
V_{TO}	For power-loss calculations only		0.8	V
r_T	$T_{VJ}=T_{VJM}$		15	mΩ
R_{thJC}	DC current		1.5	K/W
R_{thCK}	DC current (with heatsink compound)	typ.	0.4	

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