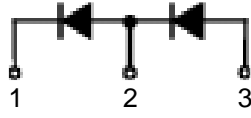
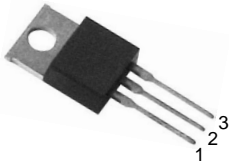
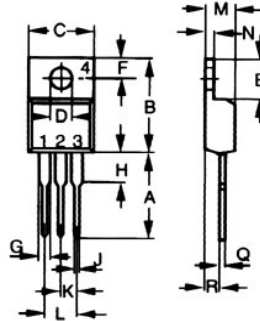


# SDD10

## Discrete Diodes



Dimensions TO-220AB



Dim.	Inches		Milimeter	
	Min.	Max.	Min.	Max.
A	0.500	0.550	12.70	13.97
B	0.580	0.630	14.73	16.00
C	0.390	0.420	9.91	10.66
D	0.139	0.161	3.54	4.08
E	0.230	0.270	5.85	6.85
F	0.100	0.125	2.54	3.18
G	0.045	0.065	1.15	1.65
H	0.110	0.230	2.79	5.84
J	0.025	0.040	0.64	1.01
K	0.100	BSC	2.54	BSC
M	0.170	0.190	4.32	4.82
N	0.045	0.055	1.14	1.39
Q	0.014	0.022	0.35	0.56
R	0.090	0.110	2.29	2.79

	$V_{RSM}$	$V_{RRM}$
	V	V
<b>SDD10N01</b>	50	50
<b>SDD10N02</b>	100	100
<b>SDD10N03</b>	200	200
<b>SDD10N04</b>	400	400
<b>SDD10N05</b>	600	600
<b>SDD10N06</b>	800	800
<b>SDD10N07</b>	1000	1000

Symbol	Test Conditions	Maximum Ratings	Unit
$I_{F(AV)M}$	$T_C=100^\circ\text{C}$ ; 180° sine	10	A
$I_{FSM}$	$T_{VJ}=45^\circ\text{C}$ ; $t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	100 110	A
	$T_{VJ}=150^\circ\text{C}$ ; $t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	90 100	
$I^2t$	$T_{VJ}=45^\circ\text{C}$ ; $t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	50 50	$\text{A}^2\text{s}$
	$T_{VJ}=150^\circ\text{C}$ ; $t=10\text{ms}$ (50Hz), sine $t=8.3\text{ms}$ (60Hz), sine	41 42	
$T_{VJ}$ $T_{VJM}$ $T_{stg}$		-40...+180 180 -40...+150	$^\circ\text{C}$
$M_d$	Mounting torque	0.4...0.6	Nm
Weight		4	g

Symbol	Test Conditions	Characteristic Values	Unit
$I_R$	$T_{VJ}=T_{VJM}$ ; $V_R=V_{RRM}$	$\leq 0.5$	mA
$V_F$	$I_F=45\text{A}$ ; $T_{VJ}=25^\circ\text{C}$	$\leq 1.15$	V
$V_{To}$	For power-loss calculations only	0.8	V
$r_T$	$T_{VJ}=T_{VJM}$	40	$\text{m}\Omega$
$R_{thJC}$	DC current	3.5	K/W