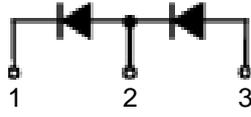
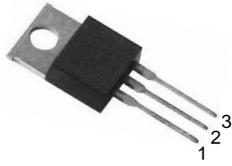
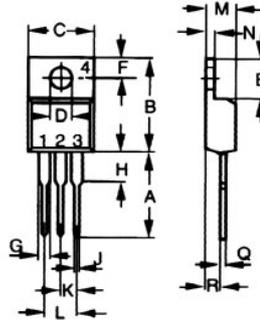


SDD10

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
SDD10N01	50	50
SDD10N02	100	100
SDD10N03	200	200
SDD10N04	400	400
SDD10N05	600	600
SDD10N06	800	800
SDD10N07	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	A^2s
	$T_{VJ}=150^\circ\text{C}$; $t=10\text{ms}$ (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	$T_{VJ}=T_{VJM}$; $V_R=V_{RRM}$	≤ 0.5	mA
V_F	$I_F=45\text{A}$; $T_{VJ}=25^\circ\text{C}$	≤ 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