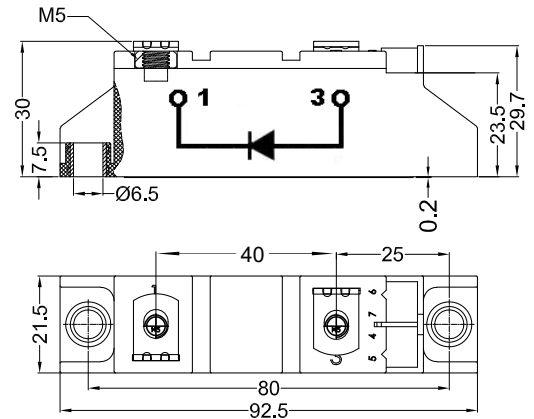


SDO60N16

STANDARD RECOVERY DIODE MODULE

Dimensions in mm (1mm=0.0394")



Type	V_{RSM} V	V_{RRM} V
SDO60N16	1700	1600

Symbol	Test Conditions		Maximum Ratings	Unit
I_{FRMS} I_{FAVM}	$T_{VJ}=T_{VJM}$ $T_C=100^{\circ}C$; 180° sine		94 60	A
I_{FSM}	$T_{VJ}=45^{\circ}C$ $V_R=0$	$t=10ms$ (50Hz), sine	1150	A
		$t=8.3ms$ (60Hz), sine	1300	
	$T_{VJ}=T_{VJM}$ $V_R=0$	$t=10ms$ (50Hz), sine	1000	
		$t=8.3ms$ (60Hz), sine	1200	
$\int i^2 dt$	$T_{VJ}=45^{\circ}C$ $V_R=0$	$t=10ms$ (50Hz), sine	6600	A^2s
		$t=8.3ms$ (60Hz), sine	7000	
	$T_{VJ}=T_{VJM}$ $V_R=0$	$t=10ms$ (50Hz), sine	5000	
		$t=8.3ms$ (60Hz), sine	5950	
T_{VJ} T_{VJM} T_{stg}			-40...+150 150 -40...+125	$^{\circ}C$
V_{ISOL}	50/60Hz, RMS $I_{ISOL} \leq 1mA$	$t=1min$ $t=1s$	3000 3600	V~
M_d	Mounting torque (M5) Terminal connection torque (M5)		2.5-4/22-35 2.5-4/22-35	Nm/lb.in.
Weight	Typical		78	g

Sirectifier®

SDO60N16

STANDARD RECOVERY DIODE MODULE

Symbol	Test Conditions	Characteristic Values	Unit
I_R	$T_{VJ}=T_{VJM}; V_R=V_{RRM}$	10	mA
V_F	$I_F=180A; T_{VJ}=25^{\circ}C$	1.25	V
V_{FO}	For power-loss calculations only	0.8	V
r_F	$T_{VJ}=T_{VJM}$	4.3	m Ω
Q_s	$T_{VJ}=125^{\circ}C; I_F=50A; -di/dt=0.64A/us$	90	μC
I_{RM}		11	A
R_{thJC}	DC current	0.295	K/W
R_{thJK}	DC current	0.395	K/W
d_s	Creepage distance on surface	12.7	mm
d_A	Strike distance through air	9.6	mm
a	Maximum allowable acceleration	50	m/s ²

FEATURES

- * International standard package
- * DCB base plate
- * Glass passivated chips
- * Isolation voltage 3600 V~
- * UL File NO.E310749
- * RoHS Compliant

APPLICATIONS

- * Supplies for DC power equipment
- * DC supply for PWM inverter
- * Field supply for DC motors
- * Battery DC power supplies

ADVANTAGES

- * Space and weight savings
- * Simple mounting
- * Improved temperature and power cycling
- * Reduced protection circuits