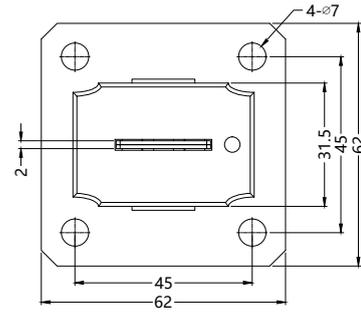
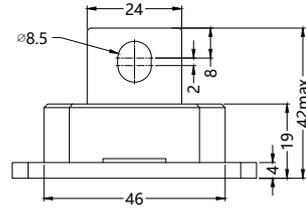


# SD150-01NB thru SD150-16NB

## Single Diode Modules



(Baseplate) Non-Isolated



	$V_{RSM}$ V	$V_{RRM}$ V
<b>SD150-01NB</b>	200	100
<b>SD150-02NB</b>	300	200
<b>SD150-04NB</b>	500	400
<b>SD150-08NB</b>	900	800
<b>SD150-10NB</b>	1100	1000
<b>SD150-12NB</b>	1300	1200
<b>SD150-16NB</b>	1700	1600

Symbol	Test Conditions	Maximum Ratings	Unit
$I_{F(AV)M}$	$T_C=100^{\circ}C$ ; 180° sine	150	A
$I_{FSM}$	$T_{VJ}=45^{\circ}C$ ; $V_R=0V$ ; $t=10ms$ (50Hz), sine $t=8.3ms$ (60Hz), sine	2500 2800	A
	$T_{VJ}=150^{\circ}C$ ; $V_R=0V$ ; $t=10ms$ (50Hz), sine $t=8.3ms$ (60Hz), sine	2250 2350	
$I^2t$	$T_{VJ}=45^{\circ}C$ ; $V_R=0V$ ; $t=10ms$ (50Hz), sine $t=8.3ms$ (60Hz), sine	45000 56000	A <sup>2</sup> s
	$T_{VJ}=150^{\circ}C$ ; $V_R=0V$ ; $t=10ms$ (50Hz), sine $t=8.3ms$ (60Hz), sine	37000 44000	
$T_{VJ}$ $T_{VJM}$ $T_{stg}$		-40...+150 150 -40...+125	°C
$M_d$	Mounting torque (M6 Baseplate)	2.5...5.0	Nm
$M_d$	Mounting torque (M8 Terminal)	8.8...11	Nm
Weight		160	g

Symbol	Test Conditions	Characteristic Values	Unit
$I_R$	$T_{VJ}=T_{VJM}$ ; $V_R=V_{RRM}$	$\leq 10$	mA
$V_F$	$I_F=450A$ ; $T_{VJ}=25^{\circ}C$	$\leq 1.20$	V
$V_{TO}$	For power-loss calculations only	0.84	V
$r_T$	$T_{VJ}=T_{VJM}$	7.16	mΩ
$R_{thJC}$	DC current typical	0.3	K/W



# SD150-01NB thru SD150-16NB

## Single Diode Modules

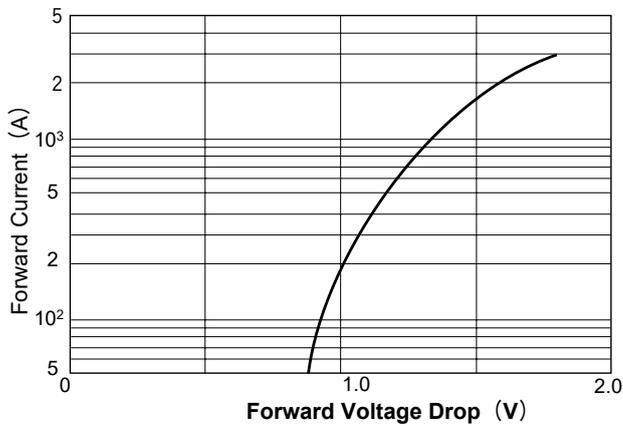


Fig.1 Maximum Forward Characteristics

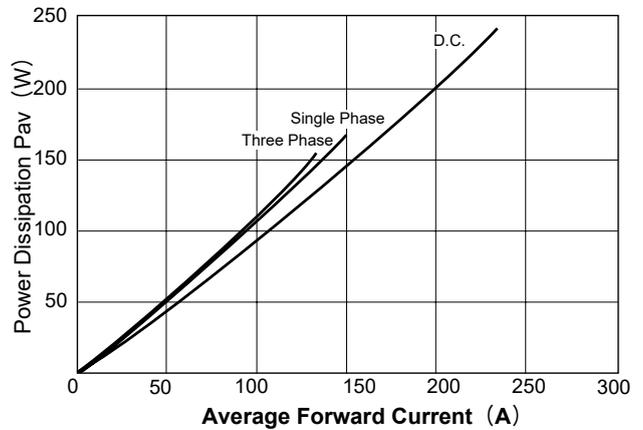


Fig.2 Average Forward Current vs. Power Dissipation

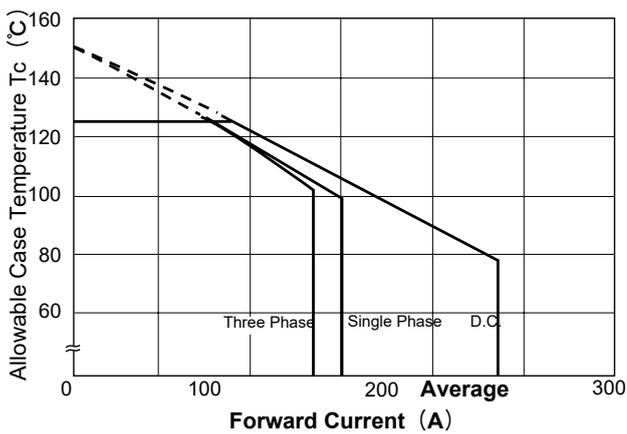


Fig.3 Average Forward Current vs. Allowable Case Temperature

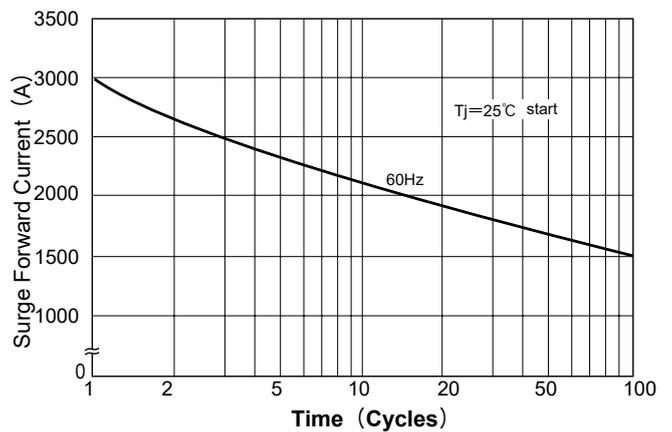


Fig.4 Cycle Surge Forward Current Rating (Non-Repetitive)

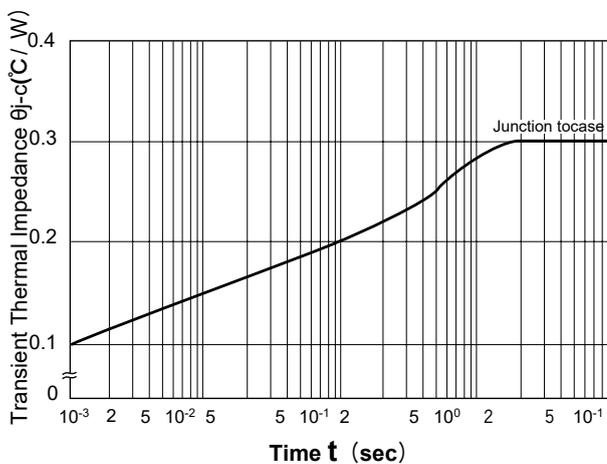


Fig.5 Transient Thermal Impedance

