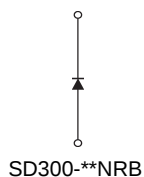
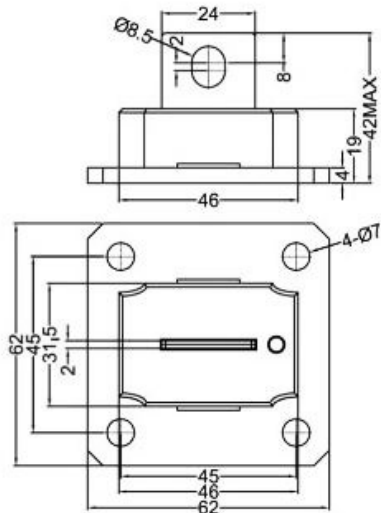


SD300

Discrete Diodes



Dimensions



	V_{RSM} V	V_{RRM} V
SD300-01NFB / SD300-01NRB	100	100
SD300-02NFB / SD300-02NRB	200	200
SD300-04NFB / SD300-04NRB	400	400
SD300-08NFB / SD300-08NRB	800	800
SD300-10NFB / SD300-10NRB	1000	1000
SD300-12NFB / SD300-12NRB	1200	1200
SD300-16NFB / SD300-16NRB	1600	1600

Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
$I_F(AV)$	Average Forward Current	Single phase, half wave, 180°conduction, $T_c : 92^\circ C$	300	A
$I_F(RMS)$	R.M.S. Forward Current	Single phase, half wave, 180°conduction, $T_c : 92^\circ C$	470	A
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 50Hz/60Hz, peak value, non-repetitive	4800 / 5400	A
I^2t	I^2t	Value for one cycle of surge current	101000	A ² S
T_j	Junction Temperature		-30 to +150	°C
T_{stg}	Storage Temperature		-30 to +125	°C
	Mounting Torque	Mounting (M6)	Recommended Value 2.5-3.9 (25-40)	4.7 (48)
		Terminal (M8)	Recommended Value 8.8-10 (90-105)	11 (115)
	Mass		170	g

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	at V_{DRM} , single phase, half wave, $T_j = 150^\circ C$	15	mA
V_{FM}	Forward Voltage Drop, max.	Forward current 900A $T_j = 25^\circ C$, Ins.measurement	1.15	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.2	°C/W

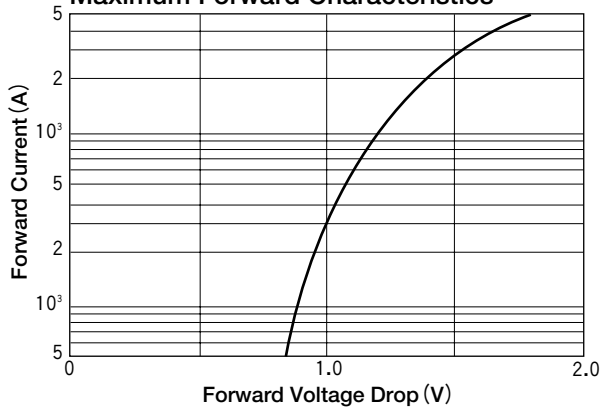
o



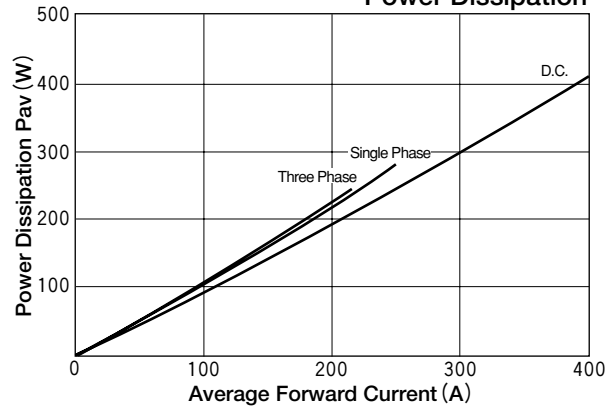
SD250

Discrete Diodes

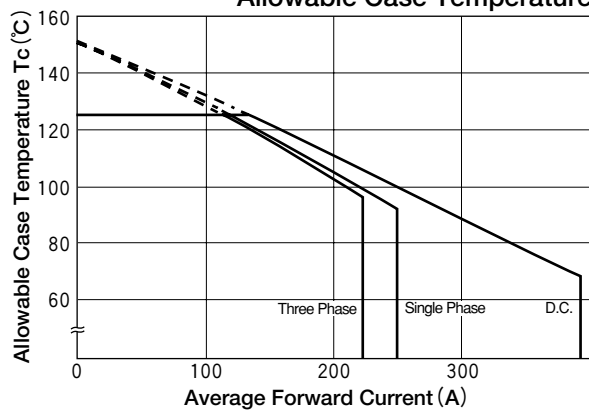
Maximum Forward Characteristics



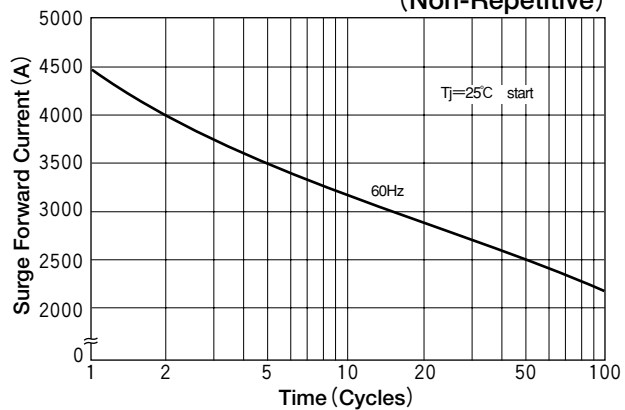
Average Forward Current vs. Power Dissipation



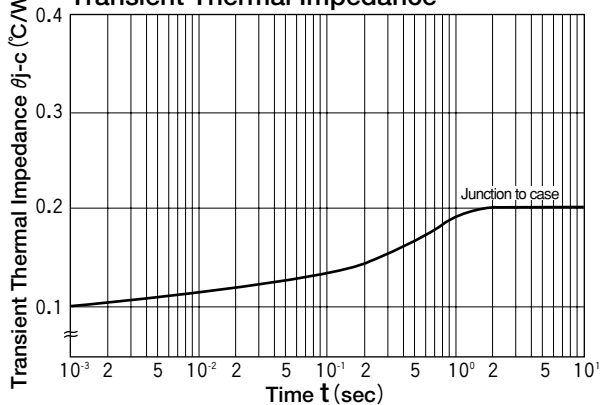
Average Forward Current vs. Allowable Case Temperature



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance



Sirectifier®