DIODE MODULE

Features

1. NKE1000 Series Diode modules are Designed for various power controls
2. Voltage rating up to 1600V
3. Electrically isolated mounting base
4. Internal connections

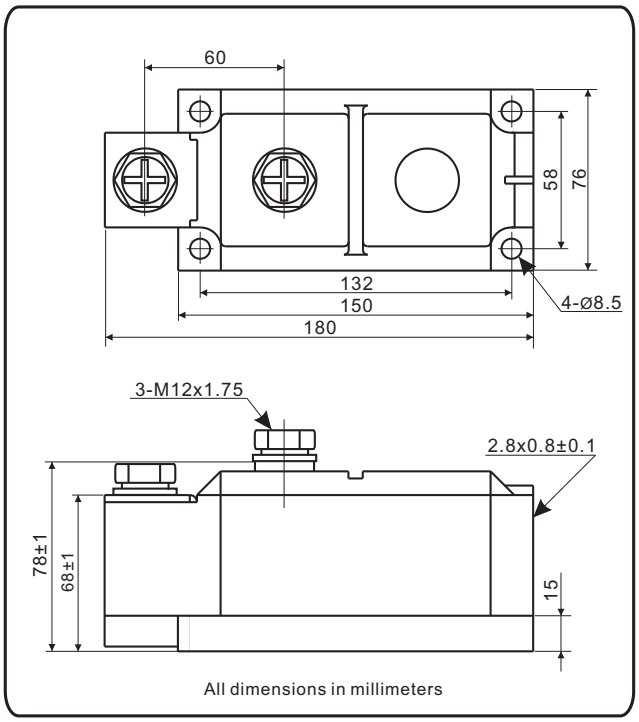
Ordering code

NKE	1000	/	xx
(1)	(2)		(3)

(1) For Diode modules NKE

(2) Maximum average forward current , A

(3) Voltage code , V (code x 100 = / V_{RRM})



Electrical Characteristics

Parameter		Condition	Max. Value	Unit
$I_{F(AV)}$	Average forward current	180° half sine wave , 50 Hz, T_j = 150°C Single side cooled , T_C=100 °C	1000	A
$I_{F(RMS)}$	R.M.S. Forward current	Single side cooled , T_C=85 °C, T_j = 150°C	1587	A
V_{RRM}	Repetitive peak reverse voltage	t_p=10 ms V_{RMS} = V_{RRM} x 1.1, T_j = 150°C	600 to 1600	V
I_{RRM}	Repetitive peak reverse current	V_R = V_{RRM}, T_j = 150°C	40	mA
I_{FSM}	Peak one-cycle surge (non-repetitive forward current)	10 ms duration T_j = 150°C V_R = 0.6 V_{RRM}	22	KA
I^2t	Max. Permissible surge energy		2395	A^2Sx10^3
V_{FM}	Peak forward voltage drop	I_{FM} = 2400A , @ T_C=25 °C	1.7	V
$V_{F(T0)}$	Forward conduction threshold voltage		0.8	V
r_t	Forward conduction slope resistance		0.36	mΩ
T_{stg}	Storage temperature range		-40 to 160	°C
$R_{th(J-C)}$	Thermal resistance	Single side cooled	0.015	°C/ W
W_t	Approximate weight		2300	g
T	Busbar to module (M 10)	A mounting compound is recommened. Torque should be rechecked after a period of 3 hours.	60	Kgf.cm
	Module to heatsink (M 6)		30	Kgf.cm

Fig. 1

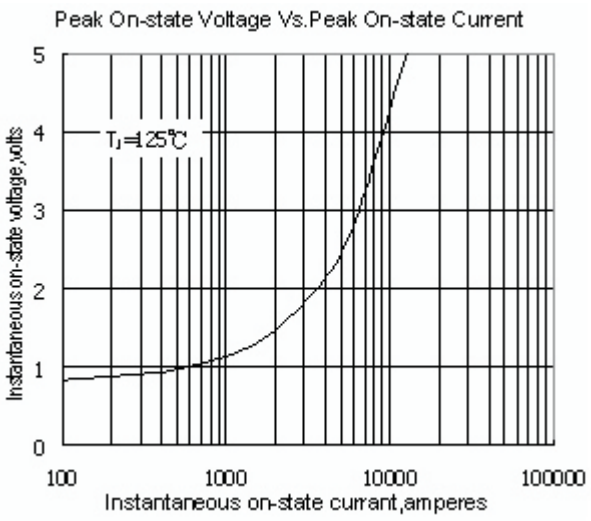


Fig. 2

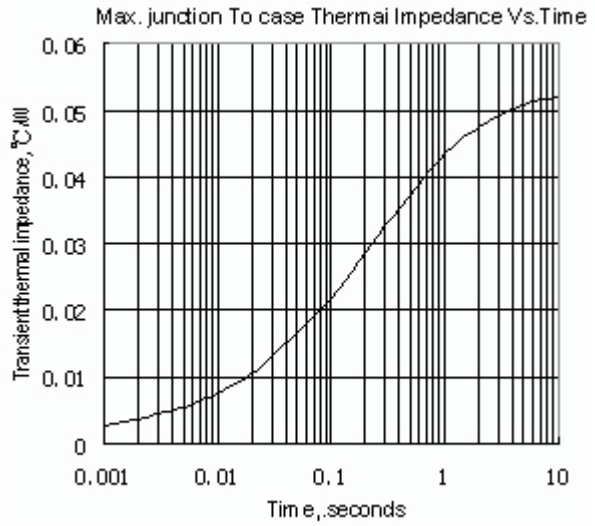


Fig. 3

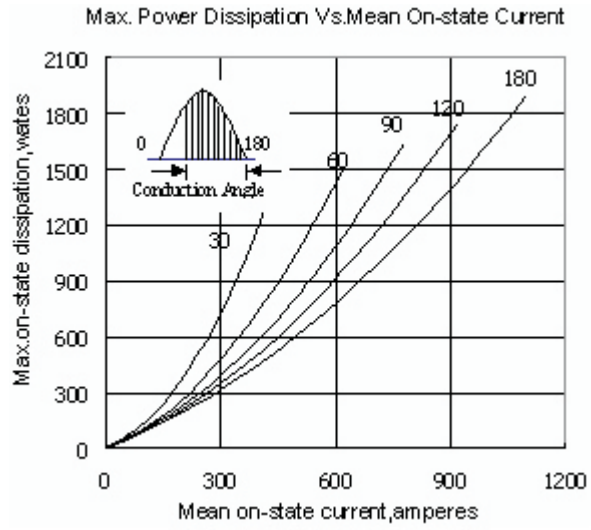


Fig. 4

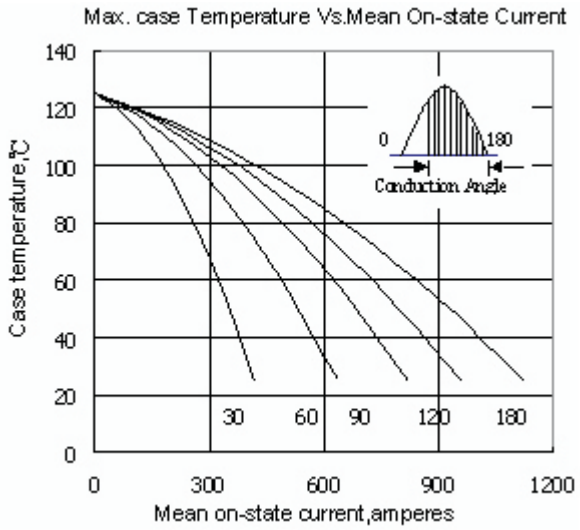


Fig.5

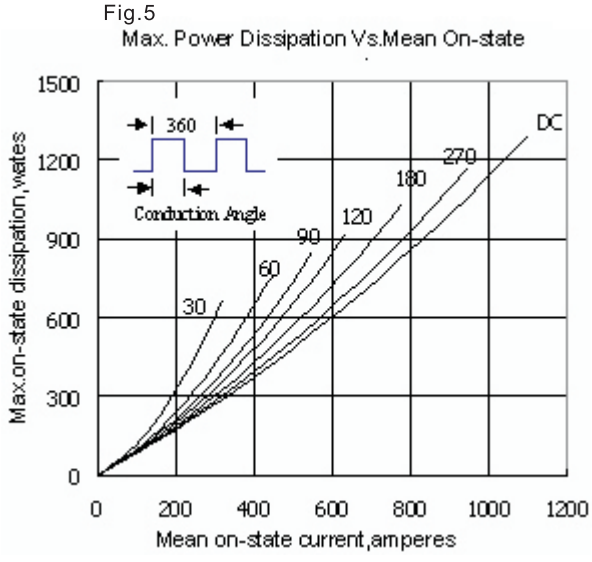


Fig. 6

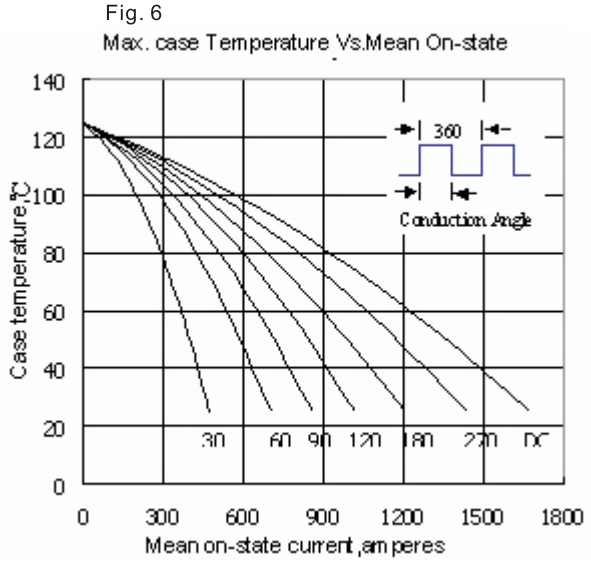


Fig. 7

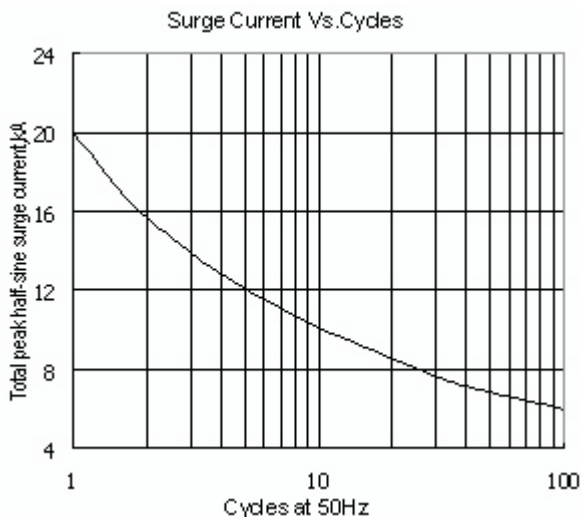


Fig. 8

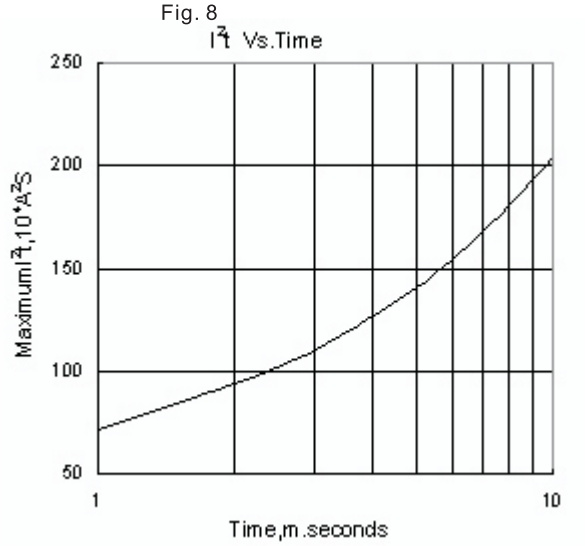


Fig. 9

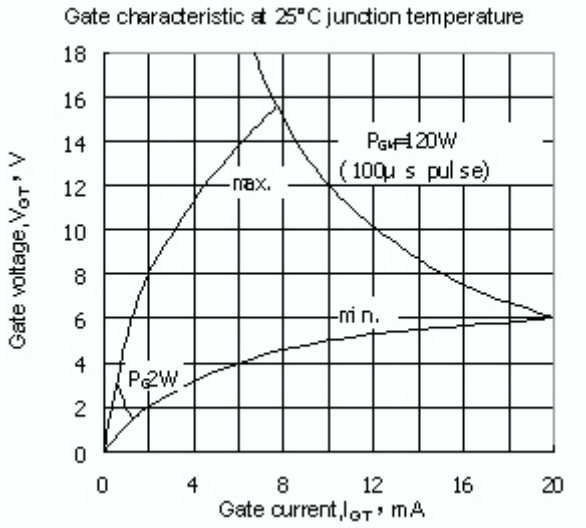


Fig. 10