

## Diode Module

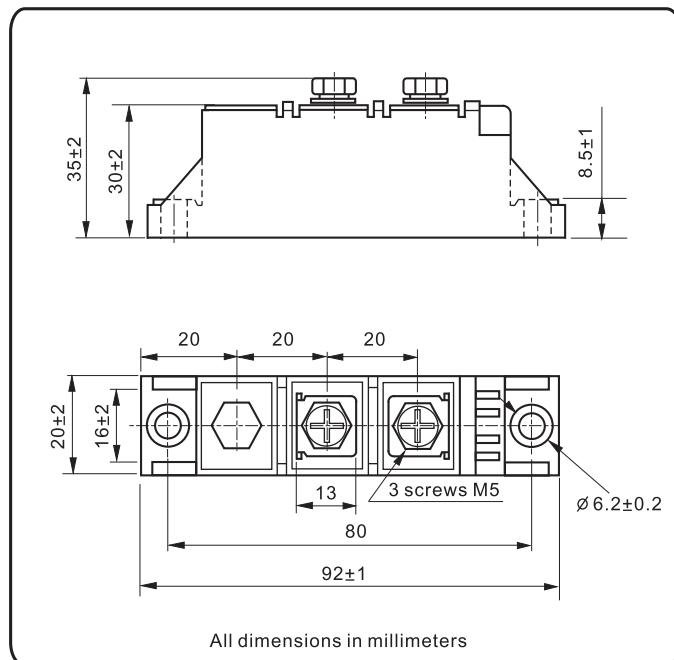
### Features

1. NKE110 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	110	/ xx
(1)	(2)	(3)

- (1) For Diode modules NKE  
(2) Maximum average forward current , A  
(3) Voltage code , V ( code x 100 = / VRMM )



### Electrical Characteristics

Parameter	Condition	Max. Value	Unit
$I_F(AV)$	Average forward current 180° half sine wave, 50 Hz Single side cooled, $T_C=100^\circ\text{C}$	110	A
$I_F(\text{RMS})$	R.M.S. Forward current Single side cooled, $T_C=85^\circ\text{C}$	173	A
$V_{\text{RRM}}$	Repetitive peak reverse voltage $t_p=10 \text{ ms } V_{\text{RMS}}=V_{\text{RRM}} \times 1.1$	600 to 1600	V
$I_{\text{RRM}}$	Repetitive peak reverse current $V_R=V_{\text{RRM}}$	8	mA
$I_{\text{FSM}}$	Peak one-cycle surge ( non-repetitive forward current ) 10 ms duration $V_R=0.6 V_{\text{RRM}}$	2600	A
$I^2 t$	Max. Permissible surge energy $V_R=0.6 V_{\text{RRM}}$	34.4	KA <sup>2</sup> S
$V_{\text{FM}}$	Peak forward voltage drop $I_{\text{FM}}=330 \text{ A, } @ T_C=25^\circ\text{C}$	1.45	V
$V_{\text{F(T0)}}$	Forward conduction threshold voltage	0.80	V
$r_t$	Forward conduction slope resistance	1.74	$\text{m}\Omega$
$T_{\text{stg}}$	Storage temperature range	-40 to 160	$^\circ\text{C}$
$R_{\text{th(J-C)}}$	Thermal resistance Single side cooled	0.35	$^\circ\text{C/W}$
$W_t$	Approximate weight	160	g
$T$	Busbar to module ( M 5 )	20	Kg-CM
	Module to heatsink ( M 5 )	30	Kg-CM

Fig. 1

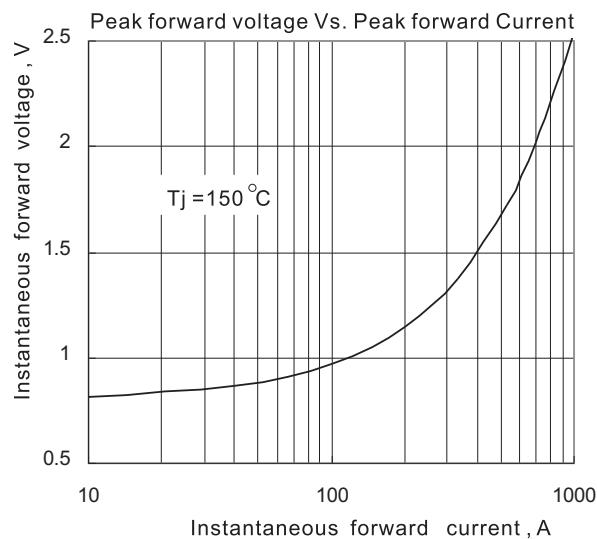


Fig. 2

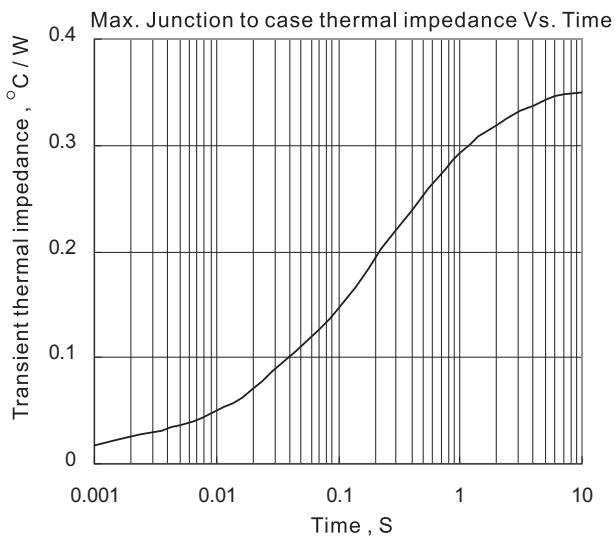


Fig. 3

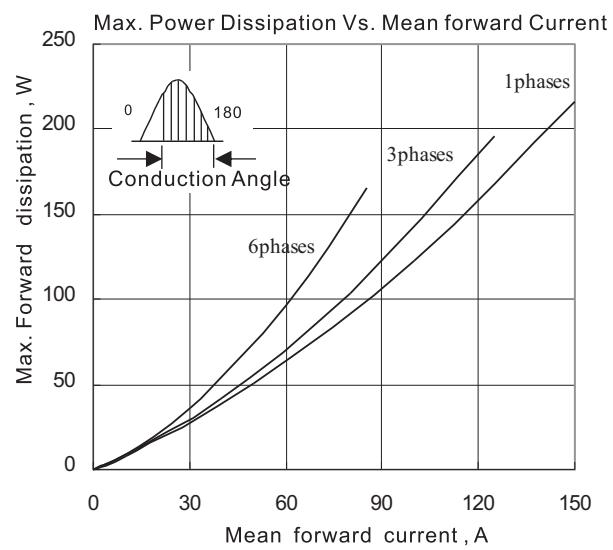


Fig. 4

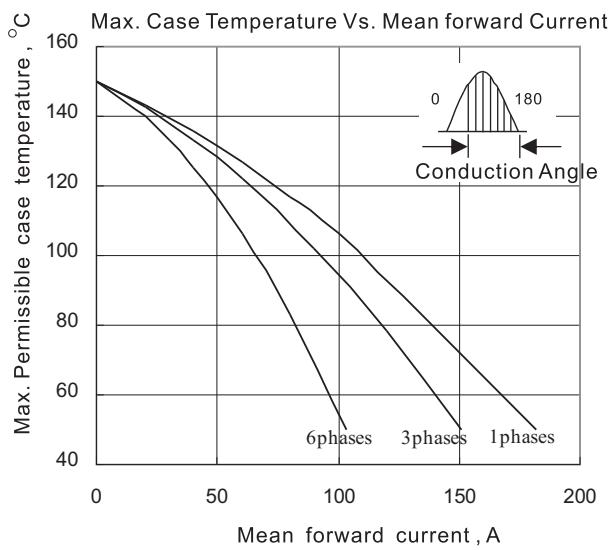


Fig. 5

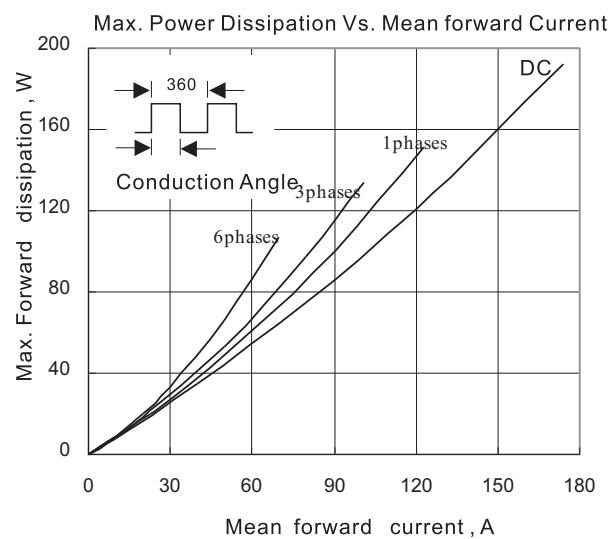


Fig. 6

