

## Fast Recovery Epitaxial Diode Module

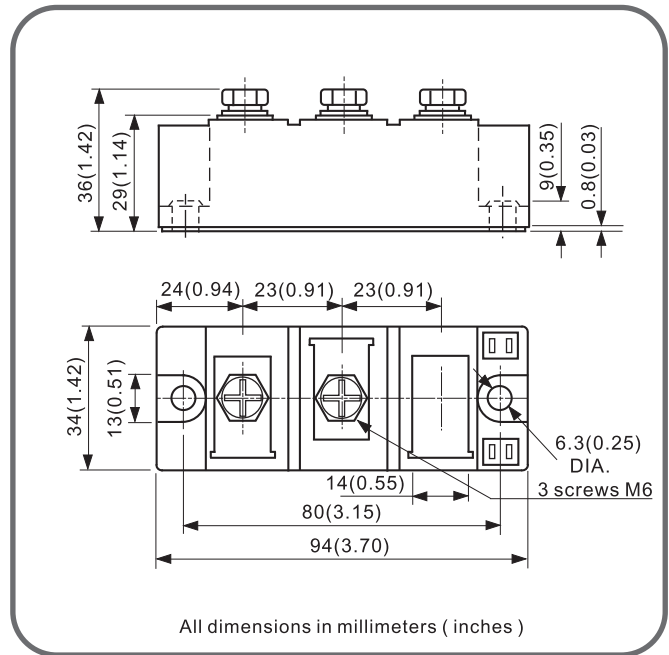
### Features

1. Short Recovery Time
2. Low Switching Losses
3. Soft Recovery Behaviour
4. Isolation Voltage 3600V

### Ordering code

NKEF	500	/	xx	ns
(1)	(2)		(3)	(4)

- (1) For Fast Diode modules  
 (2) Maximum average forward current, A  
 (3) Voltage code, V (code x 100 = VRRM)  
 (4)  $t_{rr}$  (600V=200ns, 1200V=500ns)



### Electrical Characteristics

Parameter		Condition	Max. Value	Unit
IF(AV)	Average forward current	180° half sine wave Single side cooled, Tc=75°C	500	A
IF(RMS)	R.M.S. Forward current	Single side cooled, Tc= 75°C	730	A
VRRM	Repetitive peak reverse voltage	tp=10 ms VRMS = VRRM x 1.1	600 to 1200	V
IFSM	Peak one-cycle surge ( non-repetitive forward current )	10 ms duration VR = 0.6 VRRM	4800	A
I <sup>2</sup> t	Max. Permissible surge energy		115200	A <sup>2</sup> S
VF		@ Tc=25°C	1.41	v
VISOL		IISOL ≤ 1mA t=1s	3600	v
VTO	For power-loss calculations only		0.85	v
rt	Forward conduction slope resistance		1.069	mΩ
t <sub>rr</sub>			200~500	ns
Tstg	Storage temperature range		-40 to 150	°C
Rth(J-C)	Thermal resistance	Single side cooled	0.071	K/W
Wt	Approximate weight		150	g
T	Busbar to module ( M 6 )	A mounting compound is recommended. Torque should be rechecked after a period of 3 hours.	2.3~2.8	Nm
	Module to heatsink ( M 6 )		4.5~5.5	Nm