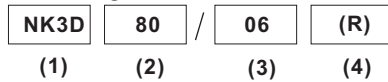


THREE PHASE DIODE MODULE

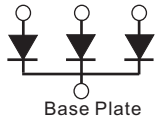
Features

1. NK3D80..(R) series Diode modules are designed for 3 phase rectification
2. Voltage rating up to 1600V
3. High surge capability

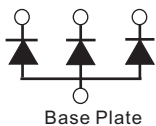
Ordering code



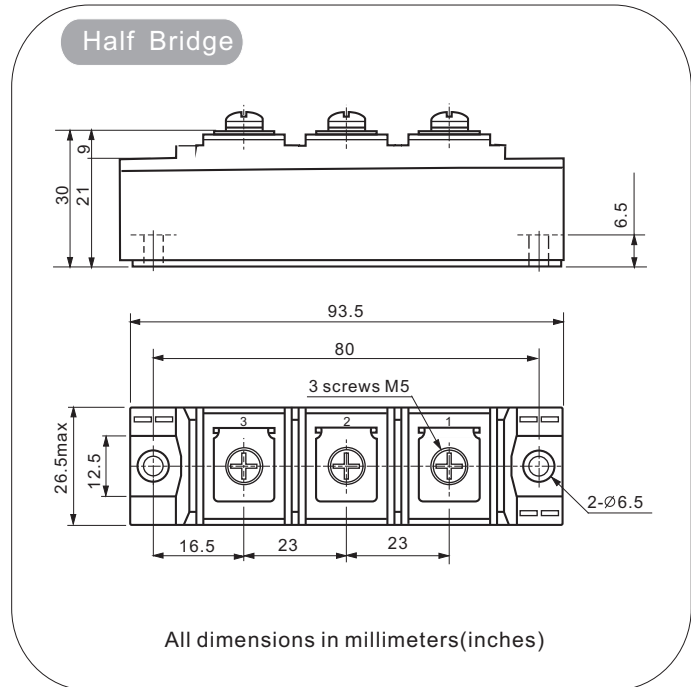
- (1) For Three Phase Diode modules
- (2) Maximum average forward current, A
- (3) Voltage code, V (code x 10 = V_{RRM})
- (4) Blank - for common cathode to base plate
R- for common anode to base plate



NK3D



NK3D..(R)



Electrical Characteristics

Parameter	Condition	Max. Value	Unit	
$I_{F(AV)}$	Average forward current 180° half sine wave, 50 Hz Single side cooled, $T_C=115^\circ\text{C}$	80	A	
$I_{F(RMS)}$	R.M.S. Forward current Single side cooled, $T_C=115^\circ\text{C}$	126	A	
V_{RRM}	Repetitive peak reverse voltage $t_p=10\text{ ms}$ $V_{RMS} = V_{RRM} \times 1.1$	200 to 1600	V	
I_{RRM}	Repetitive peak reverse current $V_R = V_{RRM}$	8	mA	
I_{FSM}	Peak one-cycle surge (non-repetitive forward current) 10 ms duration $V_R = 0.6 V_{RRM}$	1600	A	
I_t^2	Max. Permissible surge energy	9.3	KA^2S	
V_{FM}	Peak forward voltage drop $I_{FM} = 180\text{A}$	1.6	V	
V_{FO}	Forward conduction threshold voltage	0.8	V	
r_f	Forward conduction slope resistance	4.78	$\text{m}\Omega$	
T_{stg}	Storage temperature range	-40 to 150	$^\circ\text{C}$	
$R_{th(J-C)}$	Thermal resistance Single side cooled	0.7	$^\circ\text{C}/\text{W}$	
W_t	Approximate weight	340	g	
T	Busbar to module (M 5)	A mounting compound is recommended. Torque should be rechecked after a period of 3 hours.	2.7	NM
	Module to heatsink (M 6)		2.7	NM

