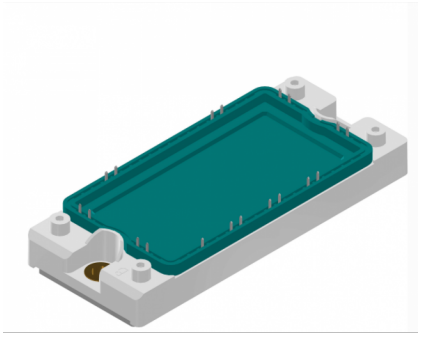

Standard Rectifier Module

VUB145-16NOXT

URL:https://www.sxplc.com/standard-rectifier-module-vub145-16noxt

Product data sheet

Symbol	Definition	Conditions		min.	typ.	max.	Unit
V_{RSM}	*max. non-repetitive reverse blocking voltage*		T_{VJ} = 25°C			1700	V
V_{RRM}	*max. repetitive reverse blocking voltage*		T_{VJ} = 25°C			1600	V
I_R	*reverse current*	V_R = 1600 V	T_{VJ} = 25°C			100	µA
		V_R = 1600 V	T_{VJ} = 150°C			2	mA
V_F	*forward voltage drop*	I_F = 50 A	T_{VJ} = 25°C			1.20	V
		I_F = 150 A				1.68	V
		I_F = 50 A	T_{VJ} = 125°C			1.13	V
		I_F = 150 A				1.74	V
I_{DAV}	*bridge output current*	T_C = 105°C	T_{VJ} = 150°C			150	A
		rectangular d = ⅓					
V_{F0}	*threshold voltage* } *for power loss calculation only*		T_{VJ} = 150°C			0.87	V
r_F	*slope resistance* }					5.9	mΩ
R_{thJC}	*thermal resistance junction to case*					0.5	K/W
R_{thCH}	*thermal resistance case to heatsink*				0.1		K/W
P_{tot}	*total power dissipation*		T_C = 25°C			250	W
I_{FSM}	*max. forward surge current*	t = 10 ms; (50 Hz), sine	T_{VJ} = 45°C			1.10	kA
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			1.19	kA
		t = 10 ms; (50 Hz), sine	T_{VJ} = 150°C			935	A
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			1.01	kA
I^2t	*value for fusing*	t = 10 ms; (50 Hz), sine	T_{VJ} = 45°C			6.05	kA^2s
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			5.89	kA^2s
		t = 10 ms; (50 Hz), sine	T_{VJ} = 150°C			4.37	kA^2s
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			4.25	kA^2s
C_J	*junction capacitance*	V_R = 400 V; f = 1 MHz	T_{VJ} = 25°C		37		pF