



## 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	$T_{vj} = 25^{\circ}C$			1700	V	
$V_{RRM}$	max. repetitive reverse blocking voltage	$T_{vj} = 25^{\circ}C$			1600	V	
$I_R$	reverse current	$V_R = 1600\text{ V}$			100	$\mu A$	
		$V_R = 1600\text{ V}$			2	mA	
$V_F$	forward voltage drop	$I_F = 50\text{ A}$			1.20	V	
		$I_F = 150\text{ A}$			1.68	V	
		$I_F = 50\text{ A}$	$T_{vj} = 125^{\circ}C$			1.13	V
		$I_F = 150\text{ A}$	$T_{vj} = 125^{\circ}C$			1.74	V
$I_{DAV}$	bridge output current	$T_C = 105^{\circ}C$ rectangular $d = \frac{1}{3}$			150	A	
$V_{FO}$	threshold voltage	$T_{vj} = 150^{\circ}C$			0.87	V	
$r_F$	slope resistance				5.9	m $\Omega$	
$R_{thJC}$	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	$T_C = 25^{\circ}C$			250	W	
$I_{FSM}$	max. forward surge current	$t = 10\text{ ms}; (50\text{ Hz}), \text{ sine}$	$T_{vj} = 45^{\circ}C$			1.10	kA
		$t = 8,3\text{ ms}; (60\text{ Hz}), \text{ sine}$	$V_R = 0\text{ V}$			1.19	kA
		$t = 10\text{ ms}; (50\text{ Hz}), \text{ sine}$	$T_{vj} = 150^{\circ}C$			935	A
		$t = 8,3\text{ ms}; (60\text{ Hz}), \text{ sine}$	$V_R = 0\text{ V}$			1.01	kA
$I^2t$	value for fusing	$t = 10\text{ ms}; (50\text{ Hz}), \text{ sine}$	$T_{vj} = 45^{\circ}C$			6.05	kA <sup>2</sup> s
		$t = 8,3\text{ ms}; (60\text{ Hz}), \text{ sine}$	$V_R = 0\text{ V}$			5.89	kA <sup>2</sup> s
		$t = 10\text{ ms}; (50\text{ Hz}), \text{ sine}$	$T_{vj} = 150^{\circ}C$			4.37	kA <sup>2</sup> s
		$t = 8,3\text{ ms}; (60\text{ Hz}), \text{ sine}$	$V_R = 0\text{ V}$			4.25	kA <sup>2</sup> s
$C_J$	junction capacitance	$V_R = 400\text{ V}; f = 1\text{ MHz}$	$T_{vj} = 25^{\circ}C$		37	pF	

