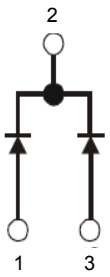
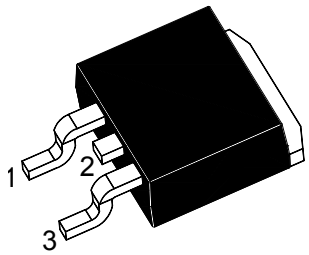
WFV16M120D-AH

Ultrafast High Voltage Rectifiers
Reverse Voltage - 1200 V
Forward Current - 16 A





1. Anode 2. Cathode 3. Anode
TO-263 Plastic Package

Features
- Very low leakage current
- Very short recovery time
- Very soft recovery behaviour
- Avalanche voltage rated for reliable operatio
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant

Applications
- Antiparallel diode for high frequency switching devices
- Antisaturation diode
- Rectifiers in switch mode power supplies (SMPS)
- Uninterruptible power supplies (UPS)

Maximum Rating (Ta = 25℃ unless otherwise specified)

Parameter		Symbols	Value	Unit
Maximun Non-Repetitive Peak Reverse Voltage	T_j = 25℃	V_{RSM}	1200	V
Maximun Repetitive Peak Reverse Voltage	T_j = 25℃	V_{RRM}	1200	V
Average Rectified Current at T_c = 125°C	Per diode Total device	$I_{F(AV)}$	8 16	A
Peak Forward Surge Current 10 ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	65	A
Thermal Resistance from Junction to Case	Per diode Total device	$R_{\theta JC}$	2.5 1.6	℃/W
Total Power Dissipaton	T_c = 25℃	P_{tot}	50	W
Operating Junction Temperature		T_j	- 55 to + 150	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

Dated: 18/09/2020 Rev:01

Maximum Rating (Ta = 25℃ unless otherwise specified)

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at I_F = 10 A , T_j = 25℃ at I_F = 10 A , T_j = 150℃	V_F	- -	2.94 1.96	V
Forward Voltage at I_F = 20 A , T_j = 25℃ at I_F = 20 A , T_j = 150℃	V_F	- -	3.57 2.56	V
Reverse Current at V_R = 1200 V, T_j = 25℃ at V_R = 1200 V, T_j = 150℃	I_R	- -	60 0.25	μA mA
Maximum Junction Capacitance at V_R = 600 V, f = 1MHz , T_j = 25℃	C_j	3	-	pF
Maximum Reverse Recovery Time at I_F = 0.5 A , I_R = 1 A , Irr = 0.25 A T_j = 25℃	t_{rr}	40	-	ns

Electrical characteristic curves

Fig 1. Reverse Characteristics

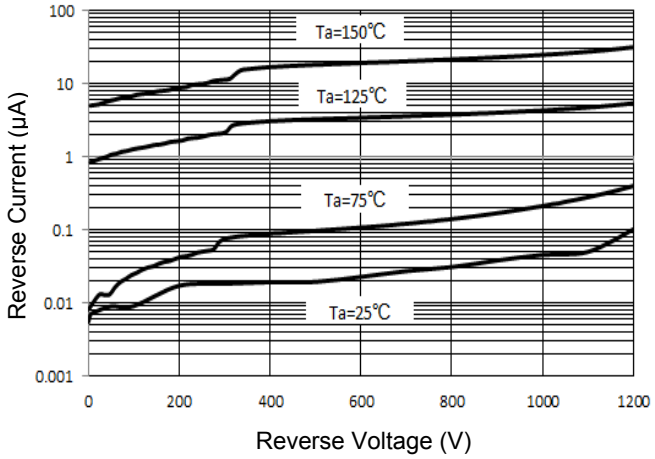


Fig 2. Forward Characteristics

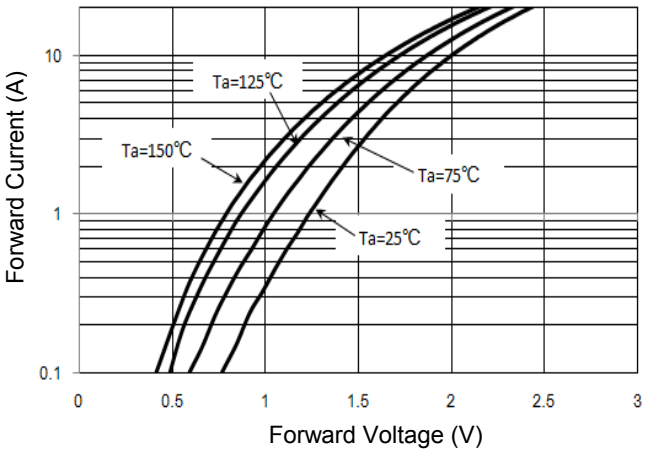


Fig 3. Junction Capacitance

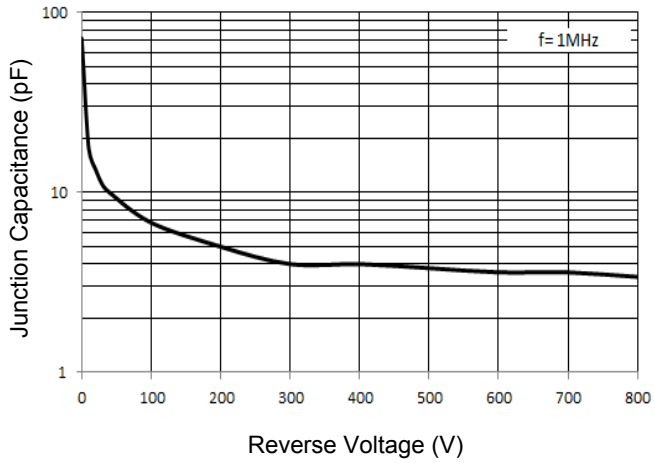
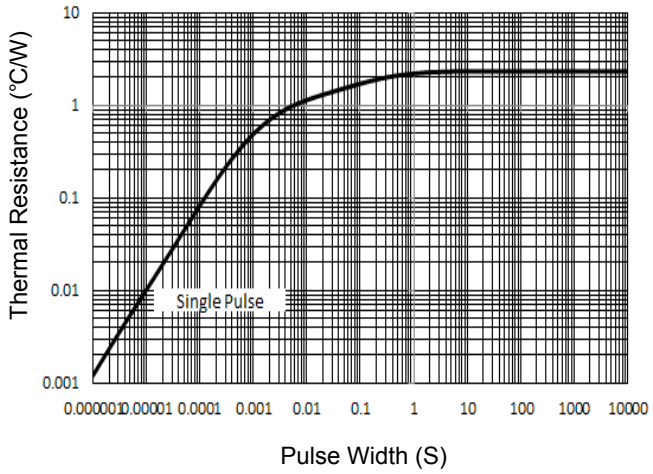
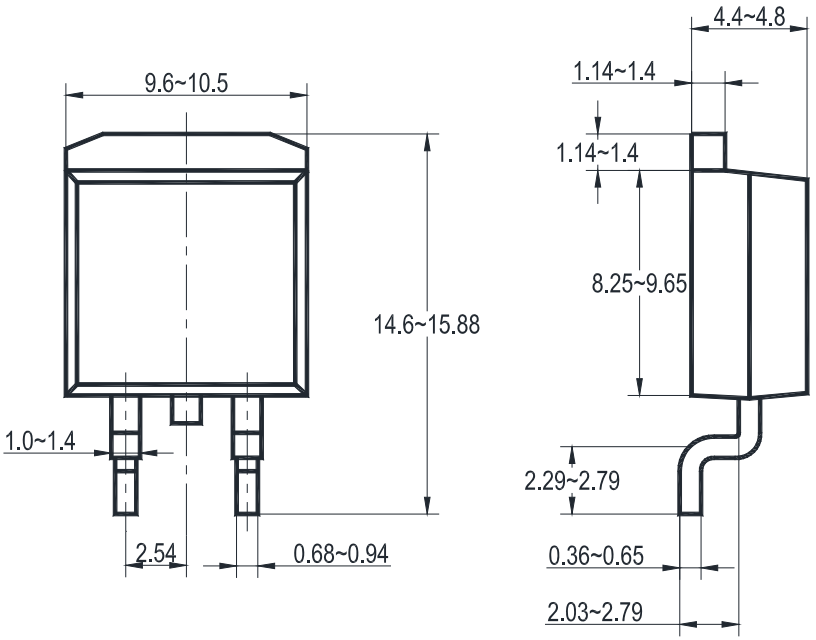


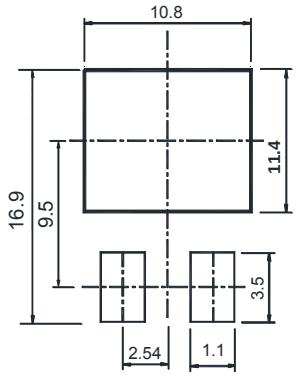
Fig 4. Thermal Resistance



Package Outline (Dimensions in mm) TO-263



Recommended Soldering Footprint



Packing information

Package	Carton Quantity	Box Quantity	Base Quantity	Delivery Mode
TO-263	5 K / Carton	1 K / Box	50 pcs / Tube	Tube

Marking information

" FV16M120D" = Part No.
" ****** " = Date Code Marking
Font type: Arial