



FRED Modules

VRRM 17
IFAV 0A

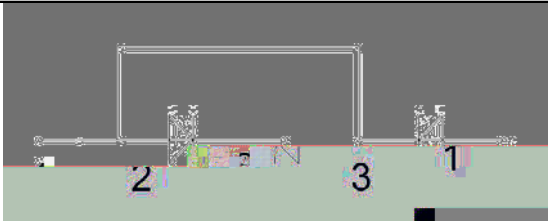
Applications

y 10V
y 10V
y 10V
y 10V
y 10V
y 10V

Features

y 10V
y 10V
y 10V
y 10V
y 10V
y 10V

Circuit



Symbol	Conditions	Values	Units
V_R		0	V
V_R		0	V
I_R	T_C	0	A
I_R	T_C	0	A
I_{DS}	12V	0	A
	12V	0	A
I^2t	T_J	0	A ² s
	T_J	0	A ² s
P_D		0	W
V	V	0	V
T_J		0	C
T_S		0	C
θ	θ θ	5	h
θ	θ θ	5	h
θ		0	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R_p	θ	0	/W



Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
I_R	$V_R = 6.0\text{ V}$	-	-	1	μA
	$V_R = 6.0\text{ V}$, $J = 25^\circ\text{C}$	-	-	5	μA
V_F	$I_F = 1.0\text{ A}$	-	2.3	-	V
	$I_F = 1.0\text{ A}$, $J = 25^\circ\text{C}$	-	2.2	-	V
t_r	$I_F = 1.0\text{ A}$, $V_R = 6.0\text{ V}$, $dI_F/dt = 10\text{ A}/\mu\text{s}$	-	6	-	μs
t_{rr}	$V_R = 6.0\text{ V}$, $I_F = 1.0\text{ A}$, $dI_F/dt = 10\text{ A}/\mu\text{s}$, $T_J = 25^\circ\text{C}$	-	3	-	μs
I_{RR}	$V_R = 6.0\text{ V}$, $I_F = 1.0\text{ A}$, $dI_F/dt = 10\text{ A}/\mu\text{s}$, $T_J = 25^\circ\text{C}$	-	0	-	A
t_{RC}	$V_R = 6.0\text{ V}$, $I_F = 1.0\text{ A}$, $dI_F/dt = 10\text{ A}/\mu\text{s}$, $T_J = 25^\circ\text{C}$	-	8	-	μs
I_{RC}	$V_R = 6.0\text{ V}$, $I_F = 1.0\text{ A}$, $dI_F/dt = 10\text{ A}/\mu\text{s}$, $T_J = 25^\circ\text{C}$	-	2	-	A

Performance Curves

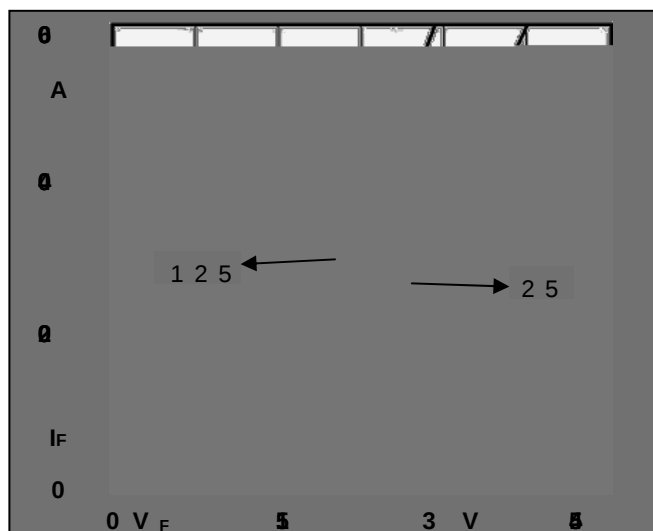


Fig1. Forward Voltage Drop vs Forward Current

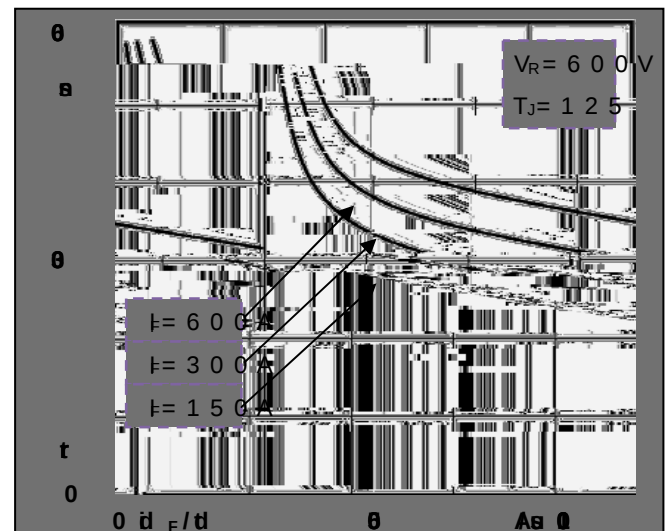


Fig2. Reverse Recovery Time vs di_F/dt

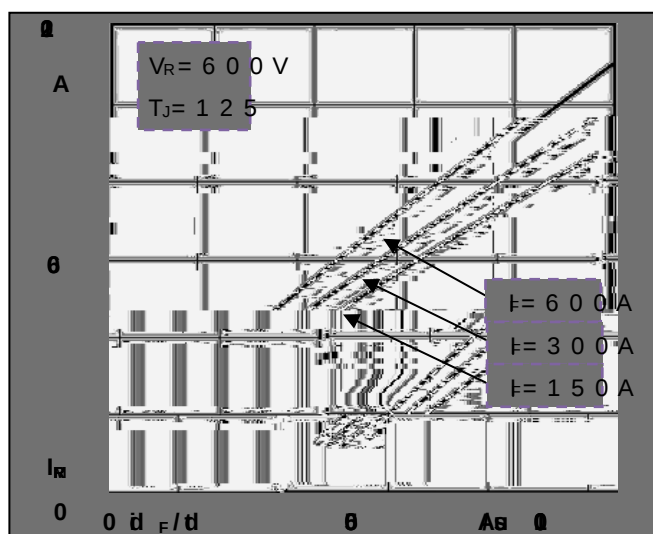


Fig3. Reverse Recovery Current vs di_F/dt

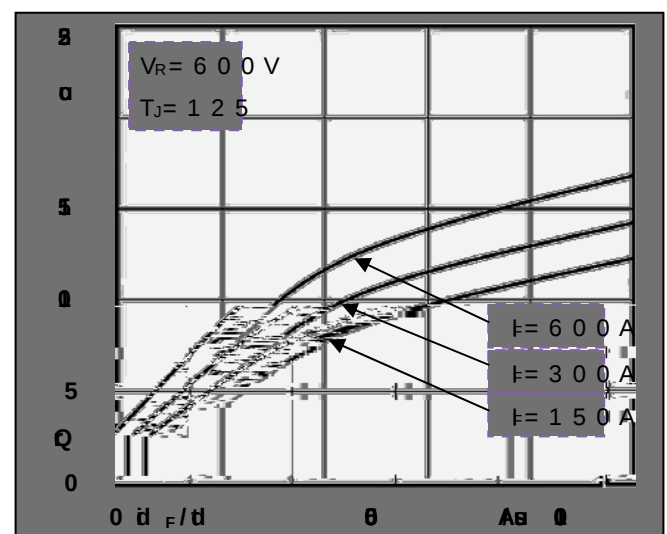
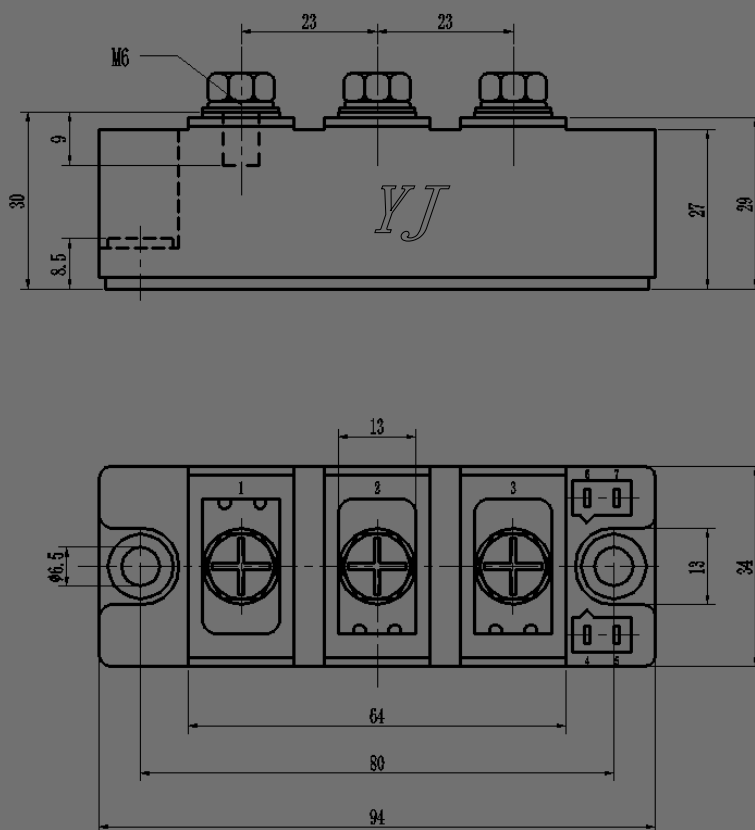


Fig4. Reverse Recovery Charge vs di_F/dt



Package Outline Information

CASE: F2



Dimensions in mm