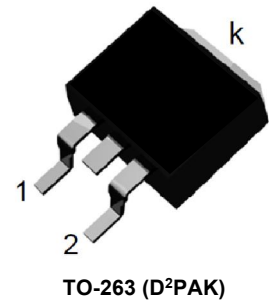


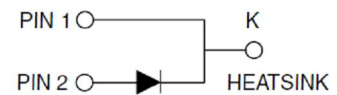
Features

- FRED (Planar) wafer construction
- Super fast recovery time
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory
Flammability Classification 94V-0



Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.4grams (approximately)
- Finish: All external surfaces corrosion resistant and terminal leads are readily solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube or tape reel packing 800/reel



Schematic Diagram

Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise specified)

Parameter	Test Conditions		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage			V _{RRM}	200	V
Working Peak Reverse Voltage			V _{RWM}	200	V
Maximum DC Blocking Voltage			V _{DC}	200	V
Maximum Average Forward Rectified Current at T _c =105°C Total Device per Diode			I _{F(AV)}	8	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per Diode			I _{FSM}	125	A
Voltage Rate of Change (Rated V _R)			DV/dt	10000	V/us
Operating Junction Temperature Range			T _J	-55 to+150	°C
Storage Temperature Range			T _{STG}	-55 to+150	°C
Maximum Reverse Recover Time (I _F =0.5Amp, I _R =1.0Amp, I _{rec} =0.25Amp)	T _{rr}		T _{rr}	35	ns
Maximum Instantaneous Forward Voltage per Leg	I _F =8A	T _C =25°C	V _F	1.00	V
	I _F =8A	T _C =125°C		0.90	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T _J =25°C		I _R	10	uA
	T _J =100°C			500	uA
Thermal Characteristics T_A=25°C unless otherwise noted					
Symbol	Parameter	TYP (TO-263)			Unit
R _{θJC}	Thermal Resistance, Junction to Case per Leg	2.0			°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient per Leg	62.5			°C /W

Note: Pulse test:300us pulse width, duty cycle=2%

Ratings and Characteristics Curves

($T_A=25^\circ\text{C}$ unless otherwise specified)

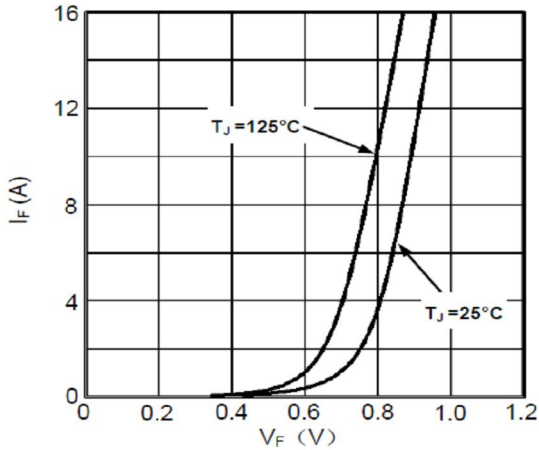


Fig1. Forward Voltage Drop vs Forward Current

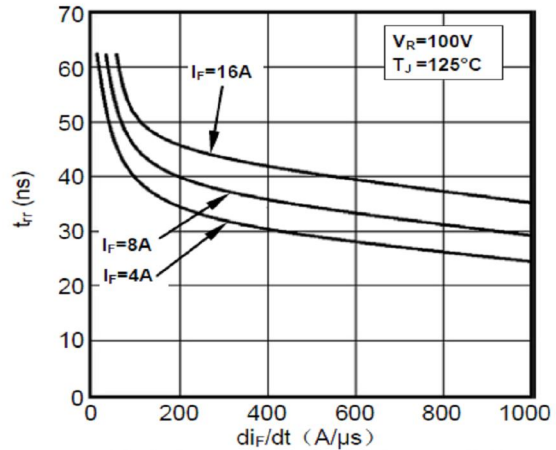


Fig2. Reverse Recovery Time vs di_F/dt

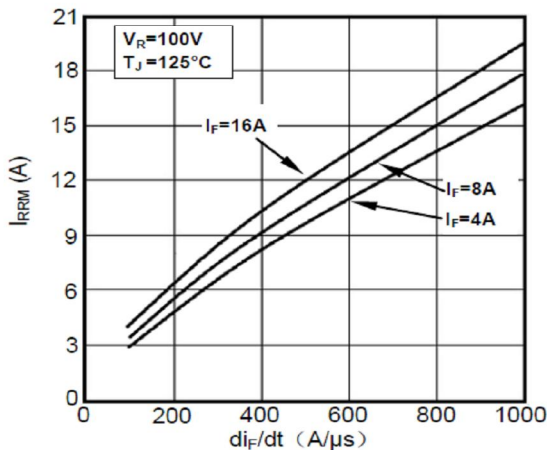


Fig3. Reverse Recovery Current vs di_F/dt

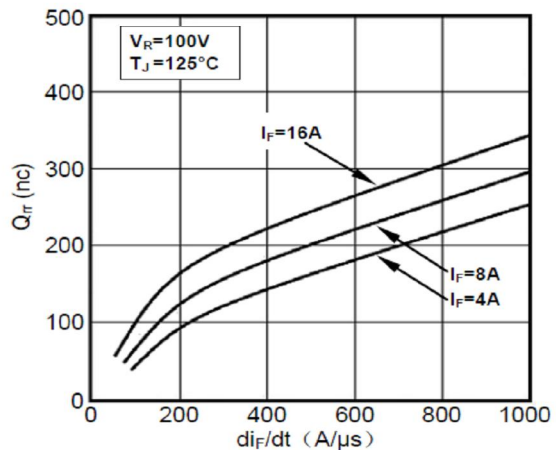


Fig4. Reverse Recovery Charge vs di_F/dt

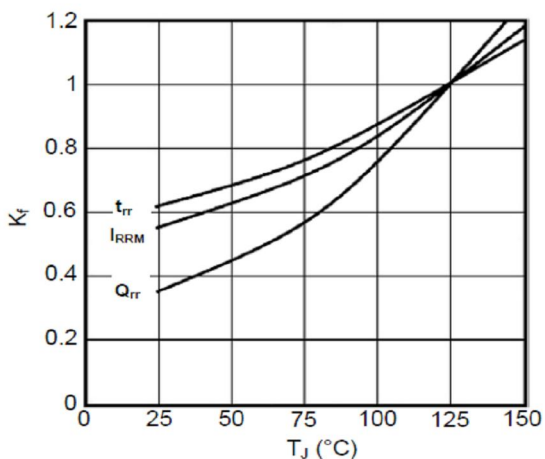


Fig5. Dynamic Parameters vs Junction Temperature

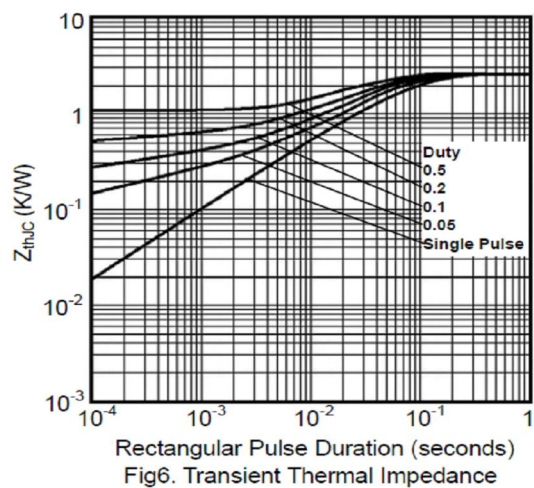


Fig6. Transient Thermal Impedance

Package Outline Dimensions

Unit: millimeters

TO-263 (D²PAK)

