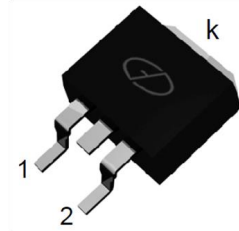


## Features

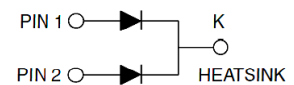
- FRED (Planar) wafer construction
- Low forward voltage drop, low power loss
- High efficiency
- Plastic package has underwriters Laboratory  
 Flammability Classification 94V-0



Package: TO-263

## 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



## Maximum Ratings and Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	200	V
Working Peak Reverse Voltage		V <sub>RWM</sub>	200	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	200	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =105°C	Total Device Per Diode	I <sub>F(AV)</sub>	16 8	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode		I <sub>FSM</sub>	125	A
Voltage Rate of Change(rated V <sub>R</sub> )		DV/dt	10000	V/us
Operating Junction Temperature Range		T <sub>J</sub>	- 55 to+150	°C
Storage Temperature Range		T <sub>STG</sub>	- 55 to+150	°C
Maximum Reverse Recover Time (I <sub>F</sub> =0.5Amp, I <sub>R</sub> =1.0Amp,I <sub>rec</sub> =0.25Amp)		T <sub>rr</sub>	35	ns
Maximum Instantaneous Forward Voltage per Leg	I <sub>F</sub> =8A T <sub>C</sub> =25°C	V <sub>F</sub>	1.00	V
	I <sub>F</sub> =8A T <sub>C</sub> =125°C		0.90	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T <sub>J</sub> =25°C	I <sub>R</sub>	10	µA
	T <sub>J</sub> =100°C		500	µA
<b>Thermal Characteristics T<sub>A</sub>=25°C unless otherwise noted</b>				
Symbol	Parameter	TYP.(TO-263)		Unit
R <sub>θJC</sub>	Thermal Resistance, Junction to Case per Leg	2.0		°C/W
R <sub>θJA</sub>	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 noted)

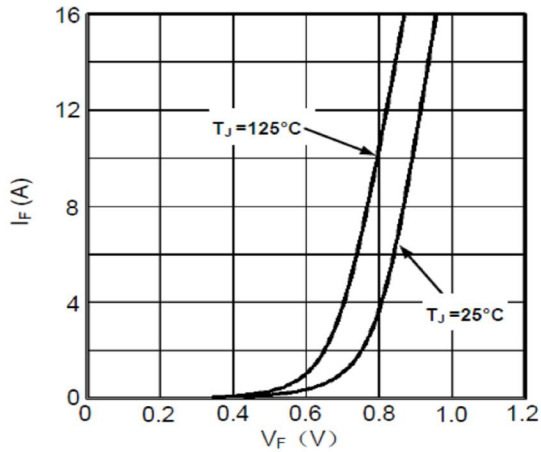


Fig1. Forward Voltage Drop vs Forward Current

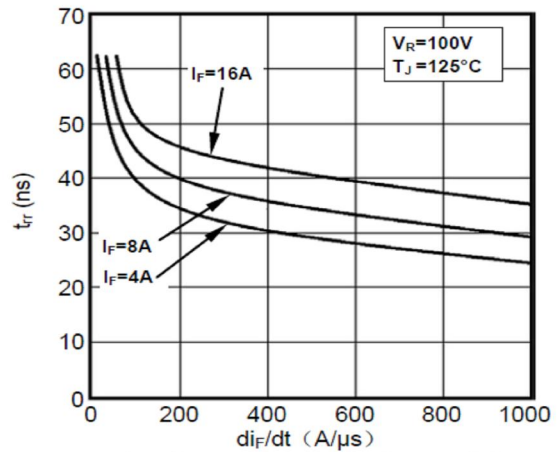


Fig2. Reverse Recovery Time vs  $di_F/dt$

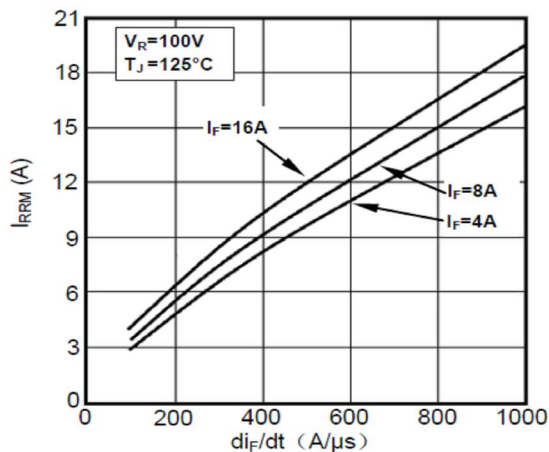


Fig3. Reverse Recovery Current vs  $di_F/dt$

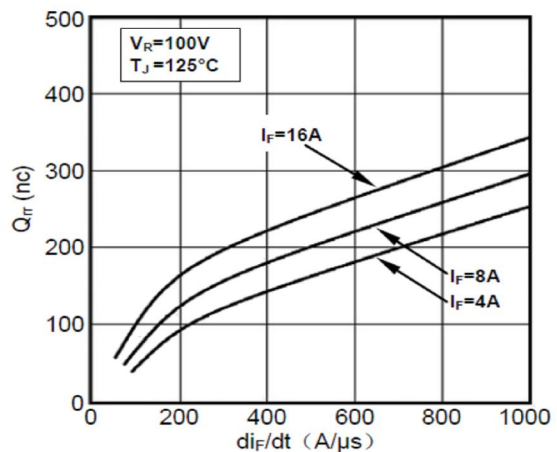


Fig4. Reverse Recovery Charge vs  $di_F/dt$

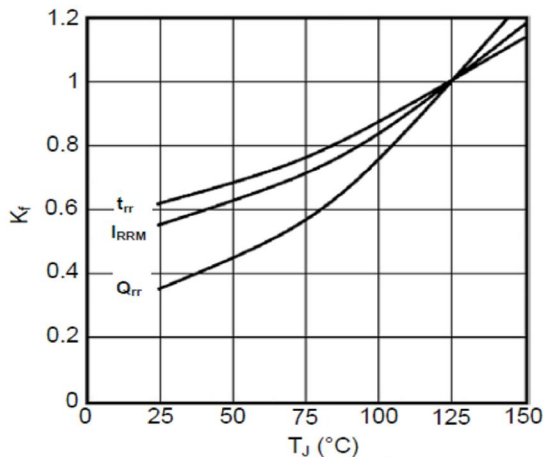


Fig5. Dynamic Parameters vs Junction Temperature

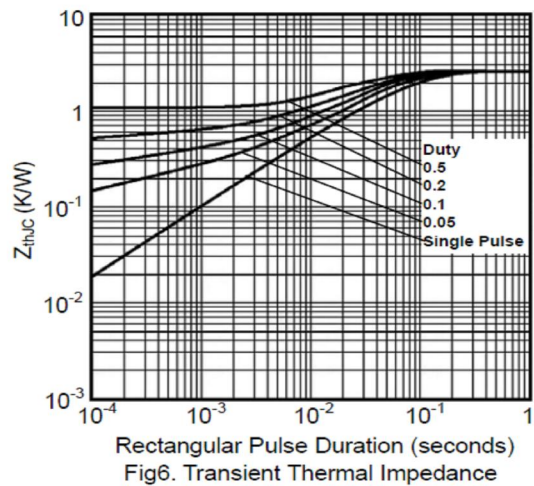
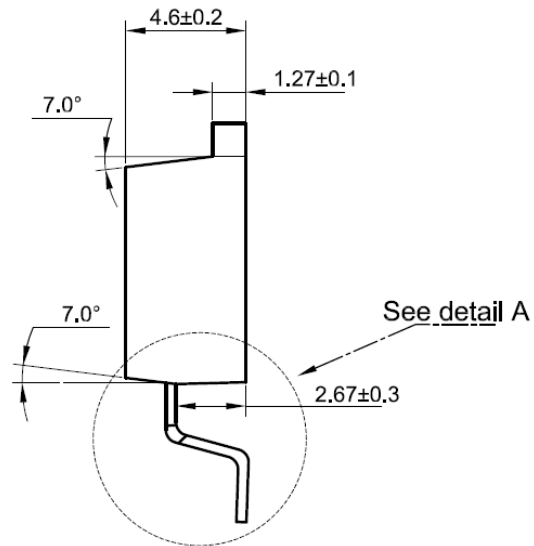
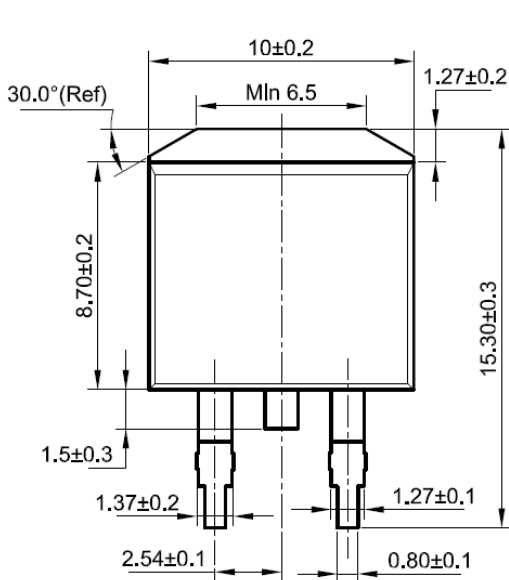


Fig6. Transient Thermal Impedance

## Package Outline Dimensions

Unit: millimeters **TO-263**



### Detail A

