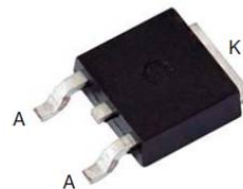


Features

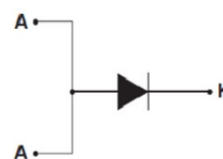
- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters
 Laboratory Flammability Classification 94V-0



TO-252 (D-PAK)

Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.4 grams (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 2500 units per reel



Schematic Diagram

Maximum Ratings & Electrical Characteristics (T_A=25°C unless otherwise noted)

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	-	I _{F(AV)}	5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	-	I _{FSM}	90	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}	35	ns
Maximum Instantaneous Forward Voltage per Leg	I _F =5A T _C =25°C I _F =5A T _C =125°C	V _F	0.96 0.88	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T _J =25°C T _J =100°C	I _R	10 500	uA uA

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance, Junction to Case per Leg	R _{θJC}	3.5	°C /W
Thermal Resistance, Junction to Ambient per Leg	R _{θJA}	62.5	°C /W

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

Typical Characteristics Curves

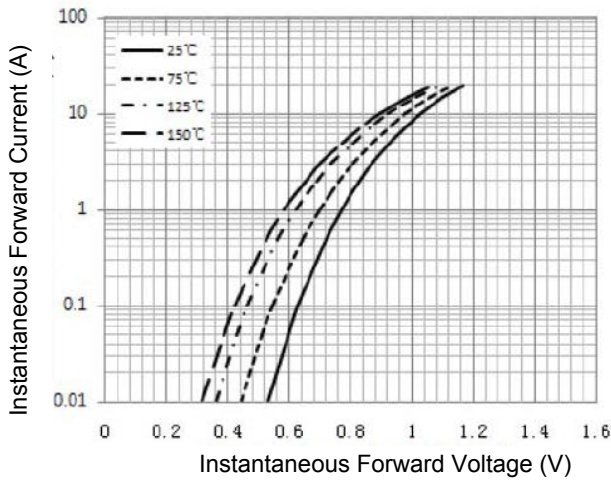


Figure 1. Typical Instantaneous Forward Characteristics

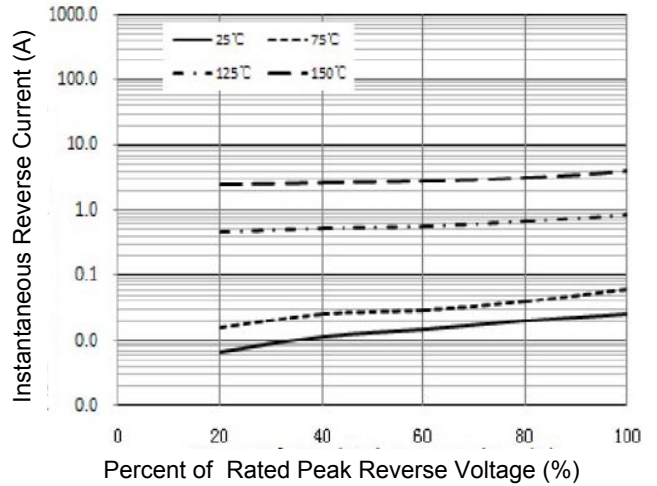


Figure 2. Typical Reverse Characteristics

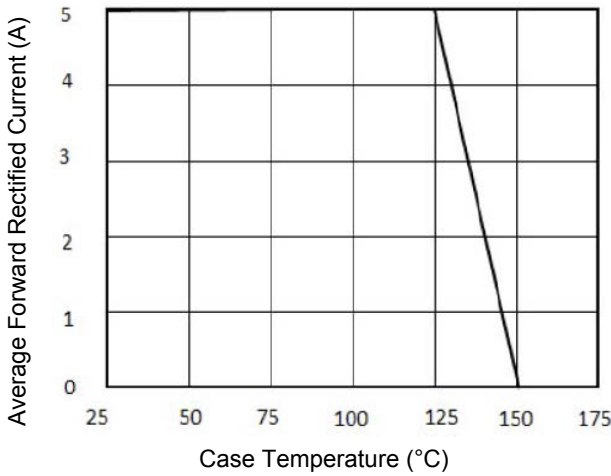


Figure 3. Forward Current Derating Curve

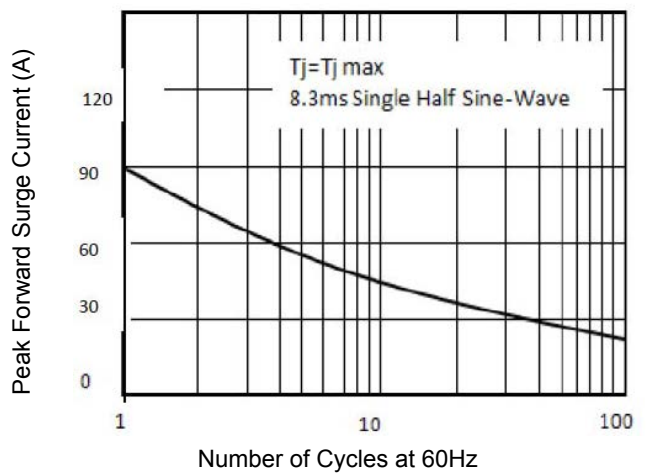


Figure 4. Maximum Non-Repetitive Peak Forward Surge Current

Package Outline Dimensions TO-252 (D-PAK)

Unit: mm

