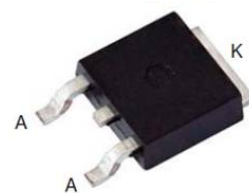


Features

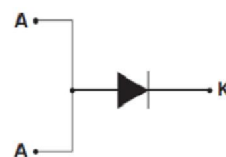
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory
Flammability Classification 94V-0



TO-252 (D-PAK)

Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.4grams(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 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}	45	V
Working Peak Reverse Voltage		V _{RWM}	45	V
Maximum DC Blocking Voltage		V _{DC}	45	V
Maximum Vverage Forward Rectified Current at T _c =105°C Total Device per Diode		I _{F(AV)}	5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load per Diode		I _{FSM}	100	A
Voltage Rate of Change(rated V _R)		DV/dt	10000	V/us
Peak Repetitive Reverse Current per Leg at t _p =2.0us ,1KHz		I _{RRM}	2.0	A
Operating Junction Temperature Range		T _J	-55 to+150	°C
Storage Temperature Range		T _{STG}	-55 to+150	°C
Isolation Voltage (ITO-220-AB only) from Terminal to Heatsink t = 1 sec		V _{AC}	1500	V
Maximum Instantaneous Forward Voltage per Leg	I _F =5A T _C =25°C	V _F	0.50	V
	I _F =5A T _C =125°C		0.42	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T _J =25°C	I _R	200	uA
	T _J =100°C		15	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

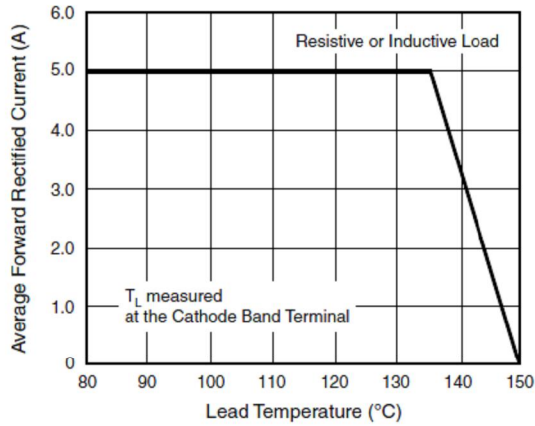


Fig. 1 - Maximum Forward Current Derating Curve

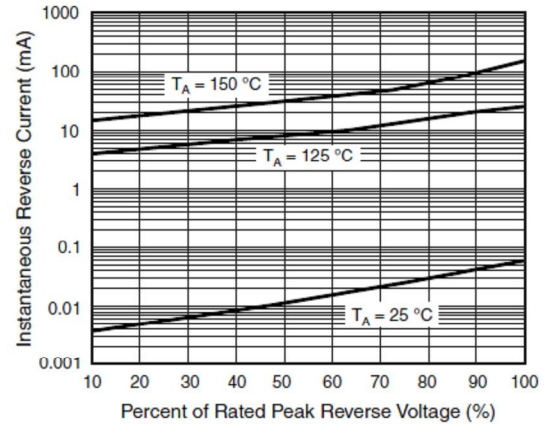


Fig. 4 - Typical Reverse Leakage Characteristics

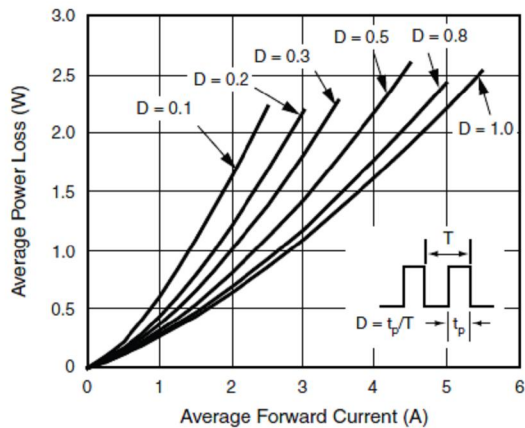


Fig. 2 - Forward Power Loss Characteristics

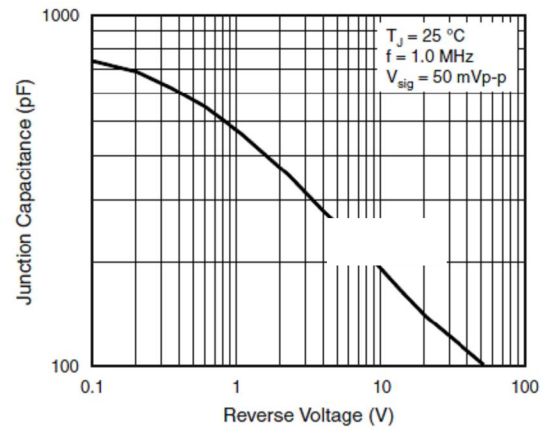


Fig. 5 - Typical Junction Capacitance

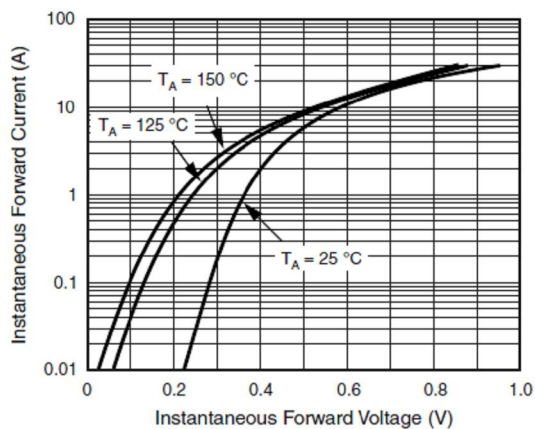


Fig. 3 - Typical Instantaneous Forward Characteristics

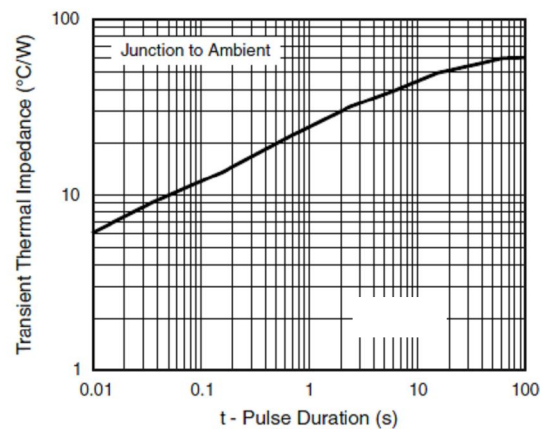


Fig. 6 - Typical Transient Thermal Impedance

Package Outline Dimensions TO-252 (D-PAK)

