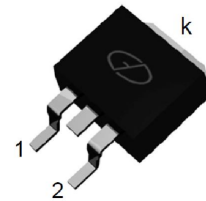


## Features

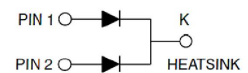
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guard ring for over voltage protection



Package: TO-263

## Mechanical Data

- Case: epoxy, molded
- Weight: 1.4grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 50 units per plastic tube or tape reel packing 800 pcs/reel



Schematic Diagram

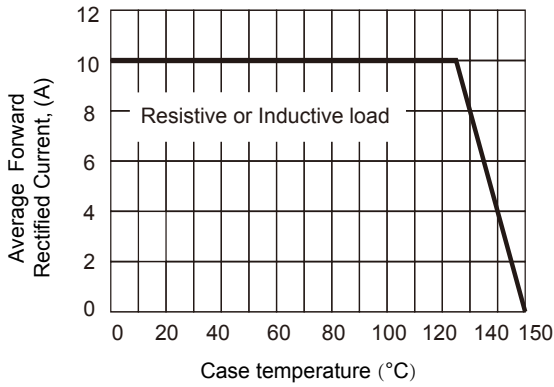
## Maximum Ratings & Electrical Characteristics

(T<sub>A</sub>=25°C unless otherwise noted)

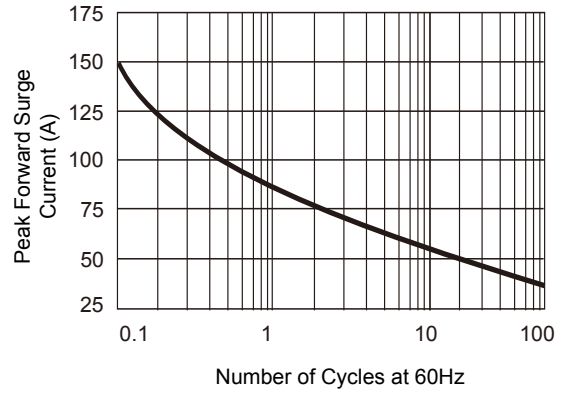
Parameter	Test Conditions	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	-	V <sub>RRM</sub>	60	V
Maximum RMS Voltage	-	V <sub>RMS</sub>	42	V
Maximum DC Blocking Voltage	-	V <sub>DC</sub>	60	V
Maximum Average Forward Rectified Current @ T <sub>C</sub> =105°C	Total Device Per Diode	I <sub>F(AV)</sub>	10 5	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode	-	I <sub>FSM</sub>	150	A
Peak repetitive Reverse Current Per Leg at tp=2.0μs ,1KHz	-	I <sub>R</sub>	1.0	A
Voltage Rate of Change (rated V <sub>R</sub> )	-	DV/dt	10000	V/μs
Operating Junction Temperature Range	-	T <sub>J</sub>	- 55 to+150	°C
Storage Temperature Range	-	T <sub>STG</sub>	- 55 to+150	°C
Maximum Instantaneous Forward Voltage per Leg	I <sub>F</sub> =5A, T <sub>C</sub> =25°C I <sub>F</sub> =5A, T <sub>C</sub> =125°C	V <sub>F</sub>	0.75 0.70	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T <sub>J</sub> =25°C T <sub>J</sub> =100°C	I <sub>R</sub>	100 5	μA mA
<b>Thermal Characteristics (T<sub>A</sub>=25°C unless otherwise noted)</b>				
<b>Parameter</b>	<b>Symbol</b>	<b>Typical</b>		<b>Unit</b>
Thermal Resistance, Junction to Case per Leg	R <sub>θJC</sub>	2.5		°C/W
Thermal Resistance, Junction to Ambient per Leg	R <sub>θJA</sub>	62.5		°C/W

**Note:** Pulse test:300us pulse width, duty cycle=1%

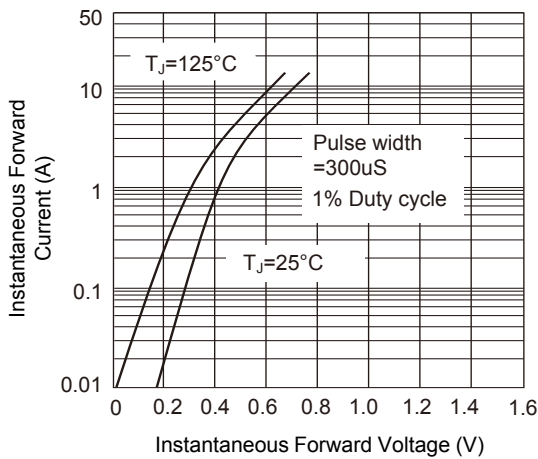
## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)



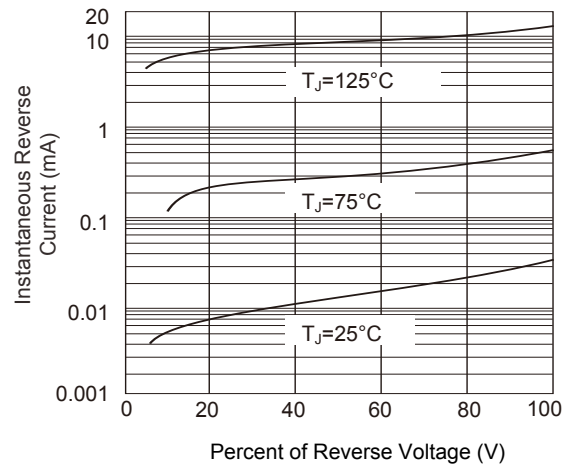
**Figure 1. Forward Current Derating Curve**



**Figure 2. Maximum Non-Repetitive Peak Forward Surge Current**



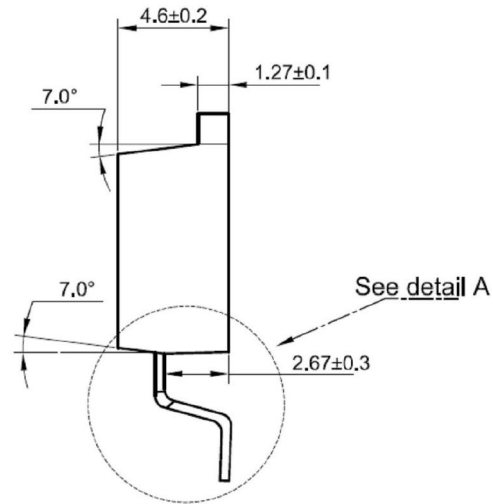
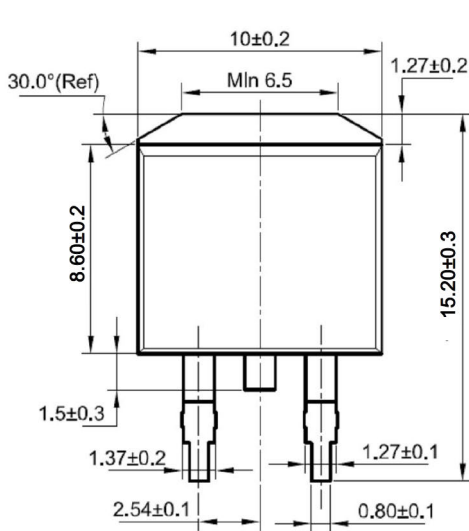
**Figure 3. Typical Instantaneous Forward Characteristics**



**Figure 4. Typical Reverse Characteristics**

## Package Outline Dimensions TO-263

Dimension in millimeters



### Detail A

