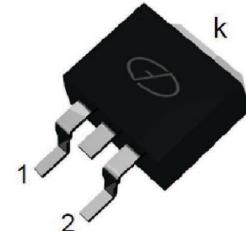


Features

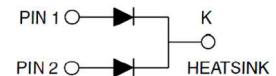
- FRED (Planar) wafer construction
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



Package: TO-263 (D²PAK)

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



Schematic Diagram

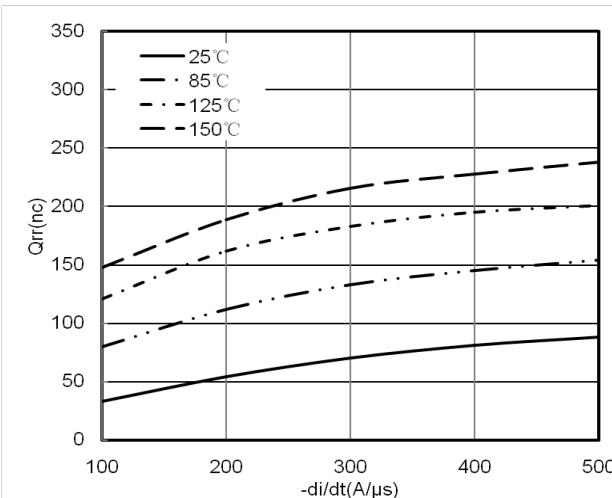
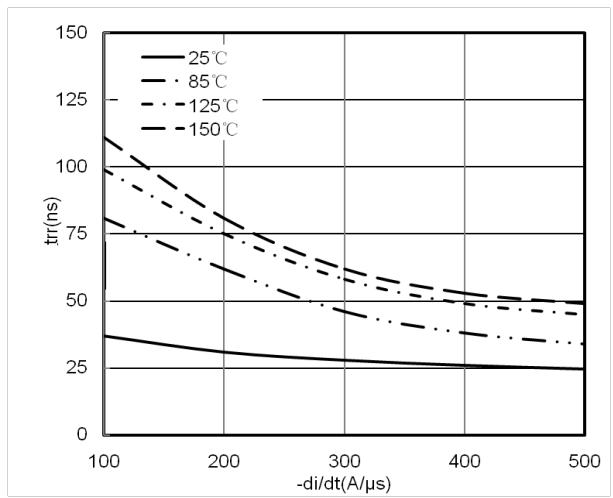
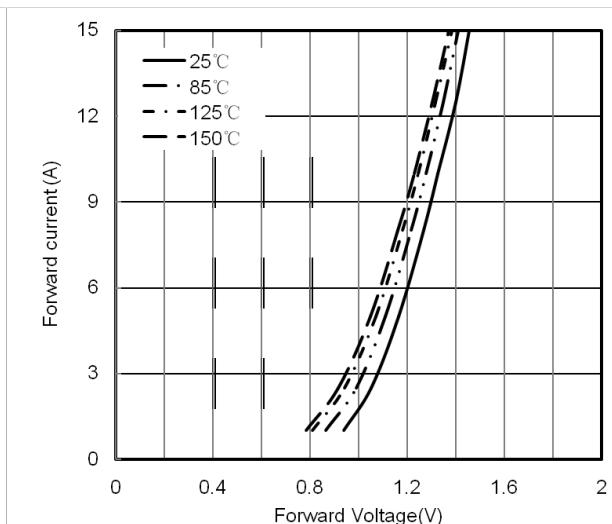
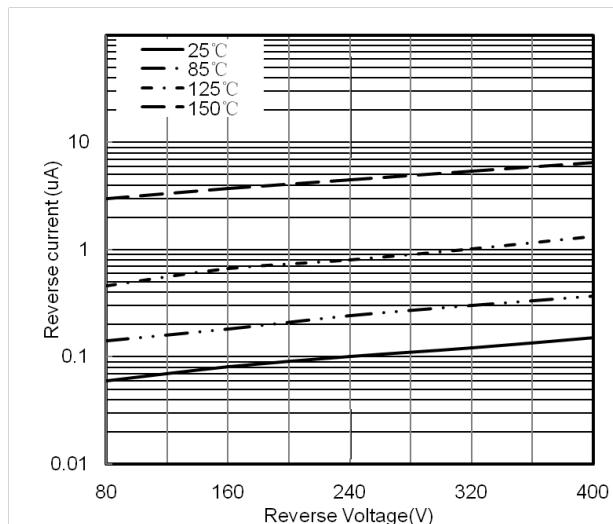
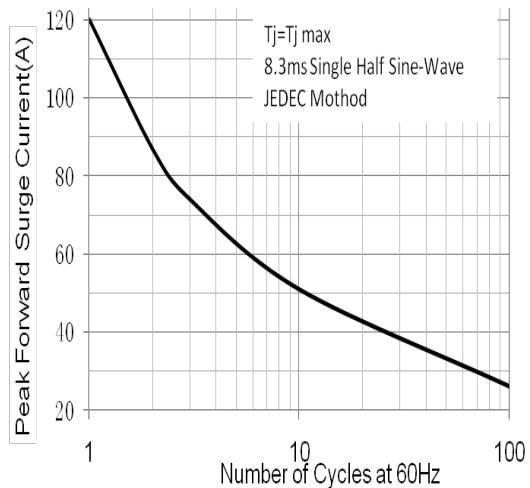
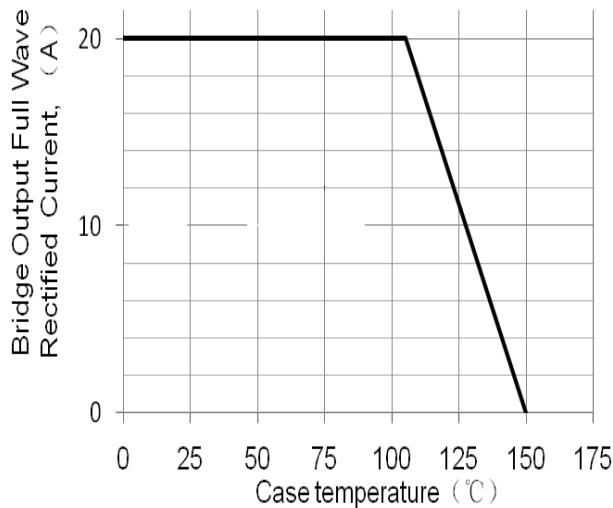
Maximum Ratings & Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	--	400	V
Working Peak Reverse Voltage	V_{RWM}	--	400	V
Maximum DC Blocking Voltage	V_{DC}	--	400	V
Maximum Average Forward Rectified Current at $T_c=105^\circ\text{C}$ Total Device per Diode	$I_{F(AV)}$	--	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode	I_{FSM}	--	120	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 ($I_f=0.5\text{Amp}$, $I_R=1.0\text{Amp}$, $I_{rec}=0.25\text{Amp}$)	T_{rr}	--	50	ns
Maximum Instantaneous Forward Voltage per Leg	V_F	$I_F=10\text{A} \quad T_c=25^\circ\text{C}$ $I_F=10\text{A} \quad T_c=125^\circ\text{C}$	1.50 1.40	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	I_R	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	10 500	uA

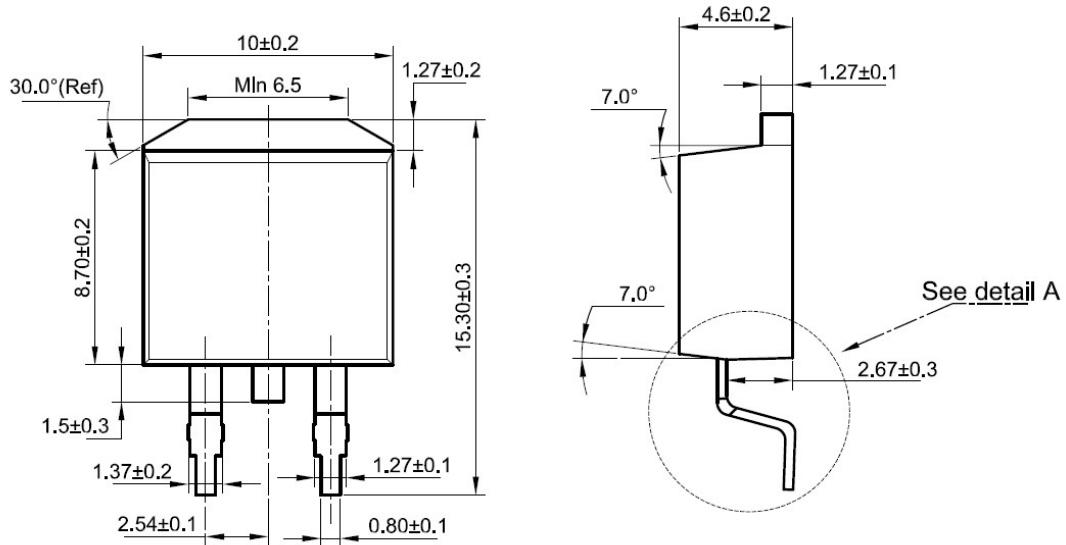
Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	TYP	Unit
Thermal Resistance, Junction to Case per Leg	$R_{\theta JC}$	2.0	°C/W
Thermal Resistance, Junction to Ambient per Leg	$R_{\theta JA}$	62.5	°C/W

Typical Characteristic Curves (TA = 25°C unless otherwise noted)



Package Outline Dimensions TO-263 (D²PAK)



Detail A

