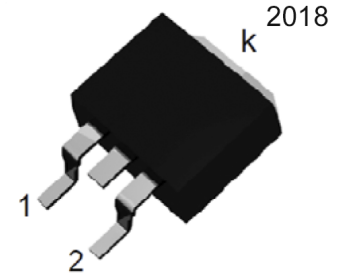


Features

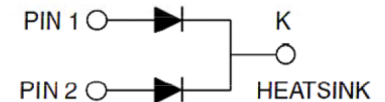
- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



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 & Electrical Characteristics

(T_A=25°C unless otherwise noted)

PARAMETER	TEST CONDITIONS		SYMBOL	MURB2060CT	UNIT
Maximum repetitive peak reverse voltage			V _{RRM}	600	V
Working peak reverse voltage			V _{RWM}	600	V
Maximum DC blocking voltage			V _{DC}	600	V
Maximum average forward rectified current at T _c =105°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}	125	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}		T _{rr}	50	ns
Maximum instantaneous forward voltage per leg	I _F =10A I _F =10A	T _c =25°C T _c =125°C	V _F	1.60 1.50	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 T_A=25°C unless otherwise noted

Symbol	Parameter	TYP (TO-263)	Unit
R _{θJC}	Thermal Resistance, Junction to Case per Leg	2.0	°C /W
R _{θJA}	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)

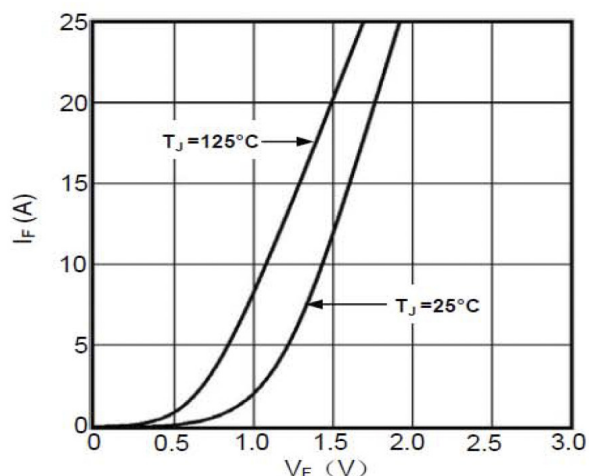


Fig1. Forward Voltage Drop vs Forward Current

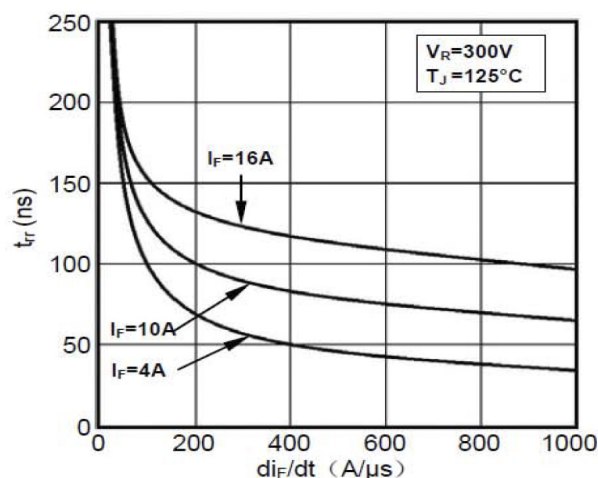


Fig2. Reverse Recovery Time vs di_F/dt

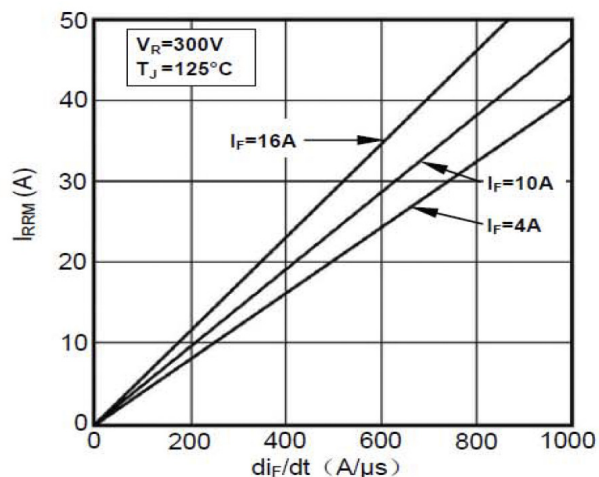


Fig3. Reverse Recovery Current vs di_F/dt

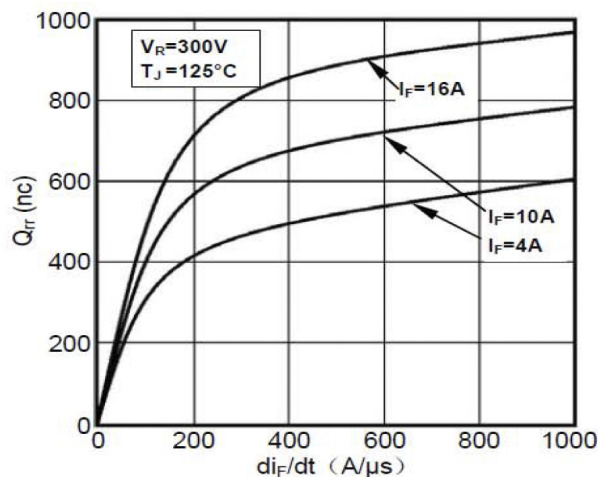


Fig4. Reverse Recovery Charge vs di_F/dt

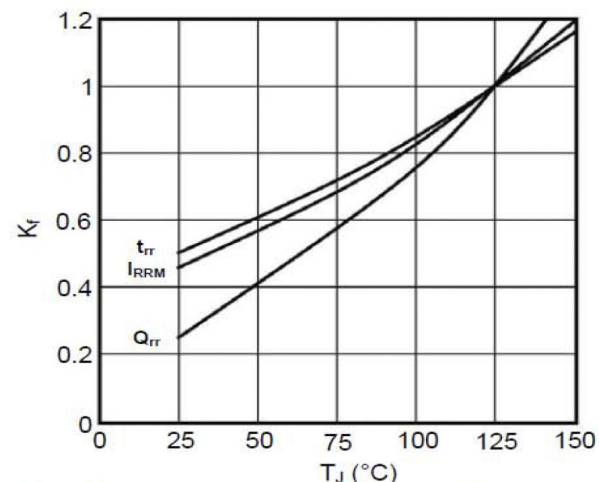


Fig5. Dynamic Parameters vs Junction Temperature

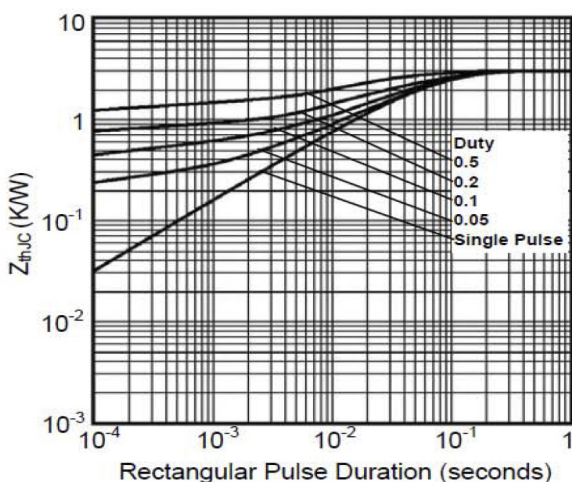
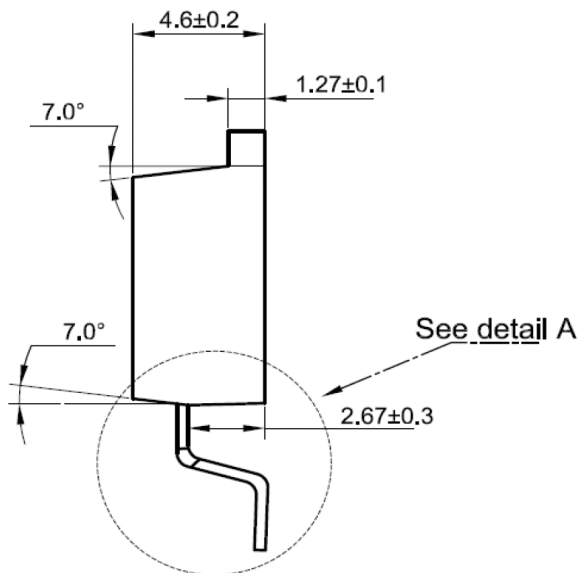
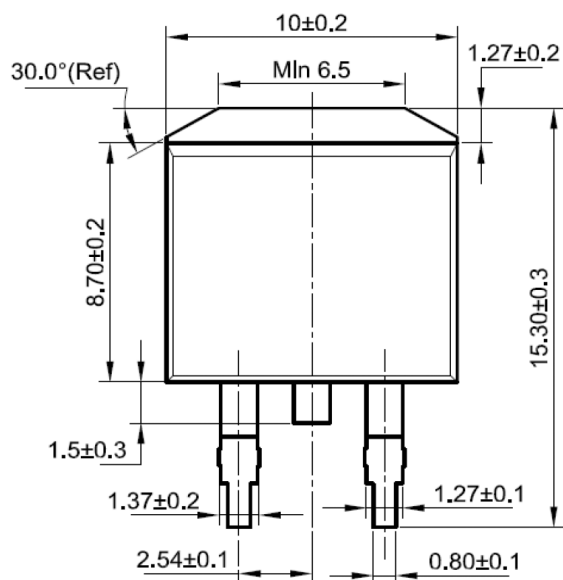


Fig6. Transient Thermal Impedance

Package Outline Dimensions

Unit: millimeters

TO-263



Detail A

