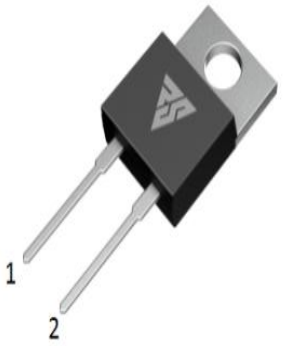
VRRM	IF（TC=140℃）	QC
1200V	10A	50nC



Applications:

- Power Factor Correction
- Sever Mode Power Supplies
- Uninterruptible Power Supply

Features:

- Low Forward Voltage Drop
- High-Speed Switching
- Positive Temperature Coefficient
- Temperature-Independent Switching Behavior

Ordering Information

Part Number	Package	Marking	Packing	Qty.
RSS10120A	TO-220-2	RSS10120A	Tube	50 PCS

Maximum Ratings （TJ= 25℃ unless otherwise specified）

Symbol	Parameter	Min	Typ	Unit	Test Conditions	Note
VRRM	Repetitive Peak Reverse Voltage		1200	V		
VRSM	Surge Peak Reverse Voltage		1200	V		
VR	DC Blocking Voltage	1200		V	IR=1mA,TJ = 25℃	
IF	Forward Current		10	A	TC=140℃	
IFRM	Repetitive Peak Forward Surge Current		50	A	TC = 25℃, tp = 10ms Half Sine Wave	
IFSM	Non-Repetitive Forward Surge Current		70	A	TC = 25℃, tp = 10ms Half Sine Wave D=0.3	
IF,Max	Non-Repetitive Peak Forward Surge Current		600	A	TC = 25℃, tp = 10us Pulse	
Ptot	Power Dissipation		205 90	W	TC = 25℃ TC = 110℃	
TJ,TSTG	Operating Junction and Storage Temperature		-55 to175	℃		

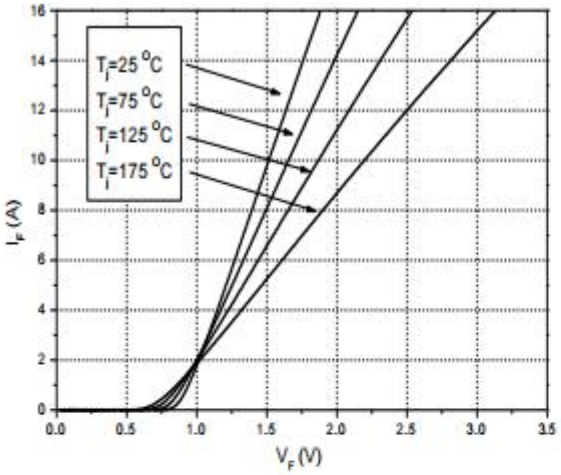
Electrical Characteristics （TJ= 25℃ unless otherwise specified）

Symbol	Parameter	Typ.	Max.	Unit	Test Conditions	Note
VF	Forward Voltage	1.5 2.2	1.8 3.0	V	IF = 10A, TJ = 25℃ IF = 10A, TJ = 175℃	
IR	Reverse Current	2 20	5 40	μA	VR =1200V, TJ = 25℃ VR =1200V, TJ = 175℃	
C	Total Capacitance	610 46 36	/	pF	VR = 0V, TJ = 25℃, f = 1MHz VR = 400V, TJ = 25℃, f = 1MHz VR = 800V, TJ = 25℃, f = 1MHz	
QC	Total Capacitive Charge	50	/	nC	VR =600V,TJ = 25℃	
Ec	Capacitance Stored Energy	23.8	/	uJ	VR =800V	

Thermal Characteristics （TJ= 25℃ unless otherwise specified）

Symbol	Parameter	Typ.	Unit	Note
RθJC	Thermal Resistance from Junction to Case	0.73	℃/W	

Typical Feature Curve



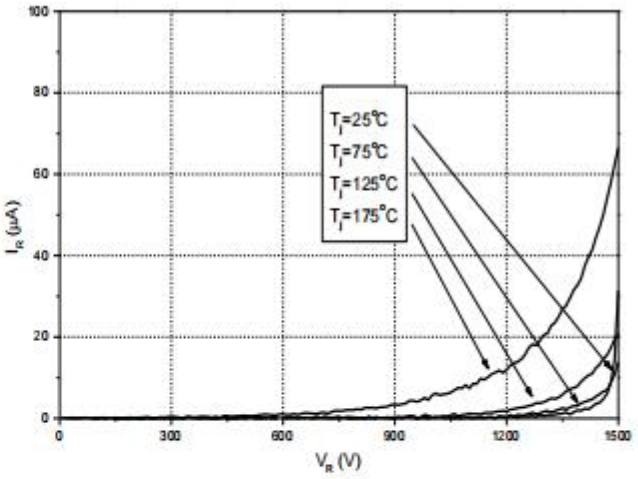
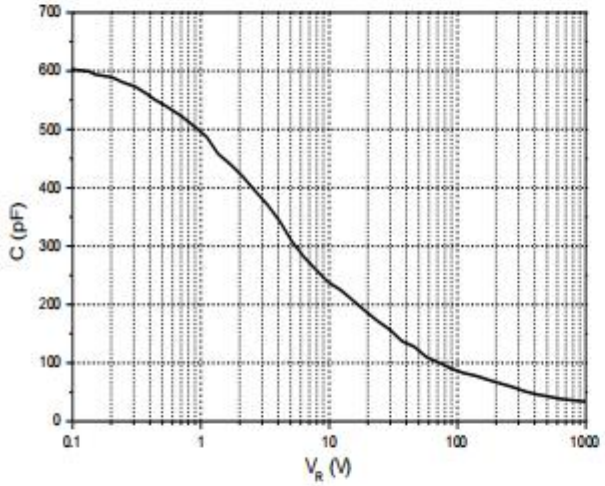


Figure 1.Forward CharacteristicsFigure2. Reverse Characteristics



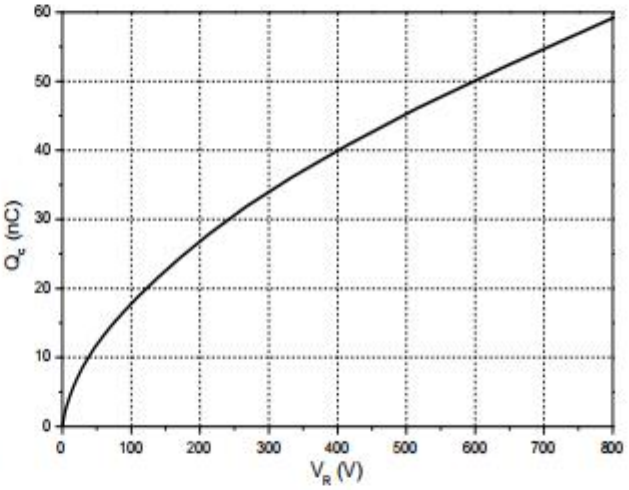
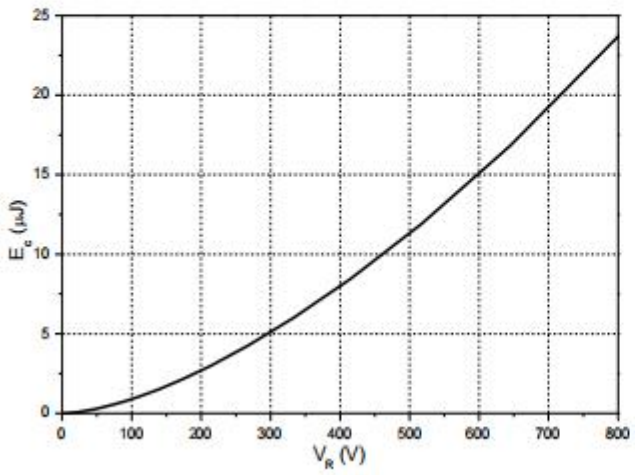


Figure 3.Capacitance vs. Reverse Voltage Figure 4. Total Capacitance Charge vs. Reverse Voltage



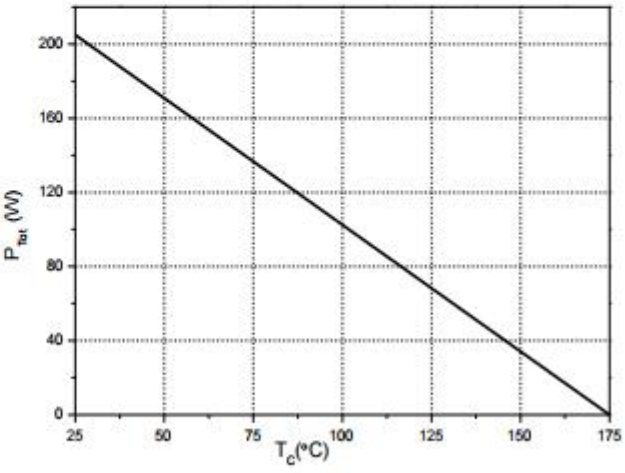
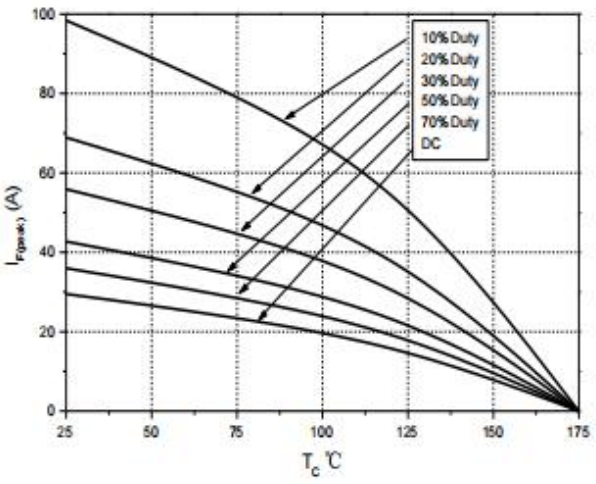


Figure 5. Capacitance Stored EnergyFigure 6. Power Derating



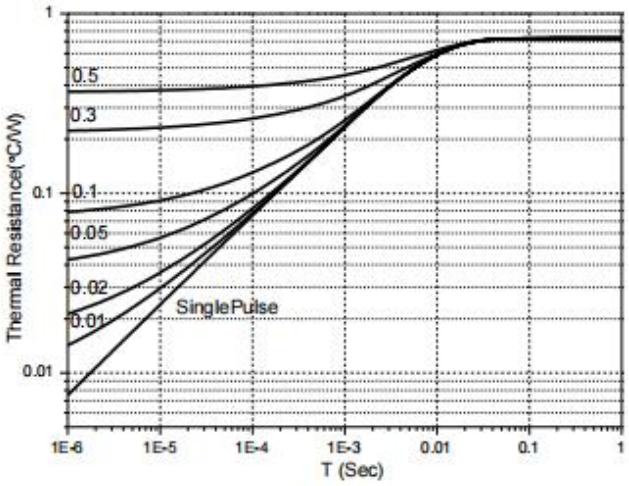
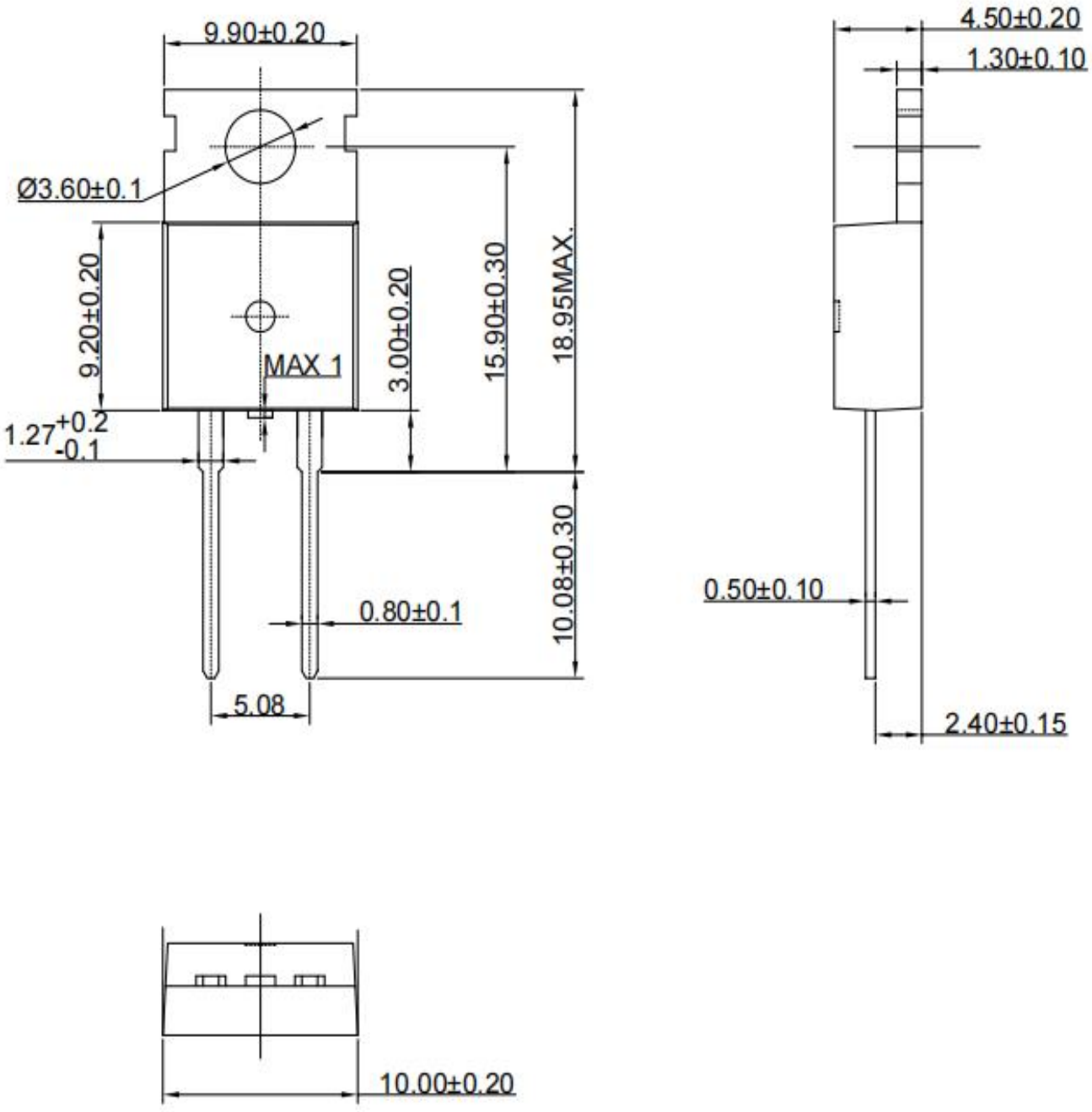


Figure 7. Current DeratingFigure 8. Transient Thermal Impendance

Package outline drawing(TO-220 Unit: mm)



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