

- 1.2kv schottky Rectifier
- Zero Reverse Recovery Current / Zero forward recovery
- High-Frequency Operation
- Temperature-Independent Switching
- Low forward voltage
- Positive Temperature Coefficient on V_F



- Replace Bipolar with Unipolar Rectifiers
- Essentially No Switching Losses
- High Efficiency
- Reduction of Heat Sink Requirements
- Parallel Devices Without Thermal Runaway

- Switch Mode Power Supplies
- Power Factor Correction
- Motor Drives
- AC/DC converters

$T_c = 25$ unless otherwise specified

V_{RRM}	Repetitive Peak Reverse Voltage	1200	V	
V_{RSM}	Surge Peak Reverse Voltage	1300	V	
V_R	DC Peak Reverse Voltage	1200	V	
I_F	Continuous Forward Current	15	A	$T_c = 158^\circ\text{C}$
I_{FSM}	Non-Repetitive Peak Forward Surge Current	140	A	$T_c = 25$ tp = 10 ms Half Sine Pulse
P_{tot}	Power Dissipation	187	W	$T_c = 25^\circ\text{C}$
		81		$T_c = 110^\circ\text{C}$

Fig.7

V_F	Forward Voltage	1.4 1.9	1.8 3	V	$I_F = 15A \quad T_J = 25$ $I_F = 15A \quad T_J = 175$	Fig.1
I_R	Reverse Current	1 7	100 200	μA	$V_R = 1200V \quad T_J = 25$ $V_R = 1200V \quad T_J = 175$	Fig.2
Q_c	Total Capacitive Charge	82		nC	$V_R = 800V \quad I_F = 15A$ $di/dt = 200A/\mu s \quad T_J = 25$	Fig.4
C	Total Capacitance	1500 74 52		pF	$V_R = 0V \quad T_J = 25 \quad f = 1MHZ$ $V_R = 400V \quad T_J = 25 \quad f = 1MHZ$ $V_R = 800V \quad T_J = 25 \quad f = 1MHZ$	Fig.3
E_c	Capacitance Stored Energy	43		μJ	$V_R = 800V$	Fig.5

R_{JC}	Thermal Resistance from Junction to Case	0.8	$^{\circ}C/W$	Fig. 7

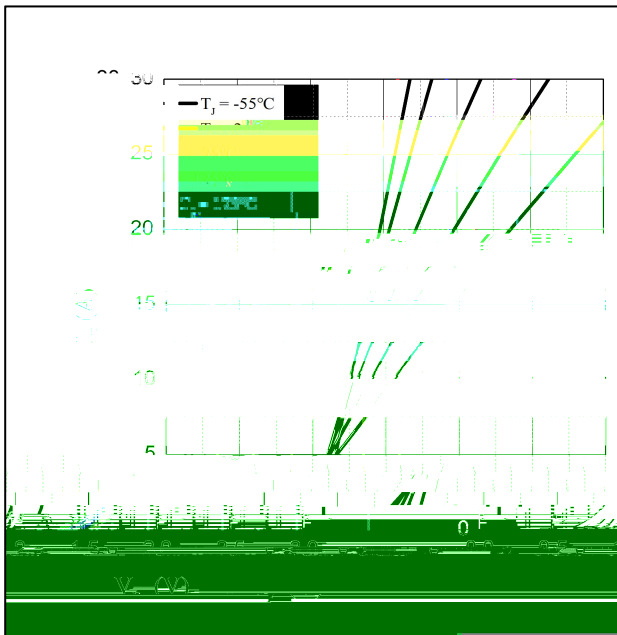


Figure 1: Forward Characteristics

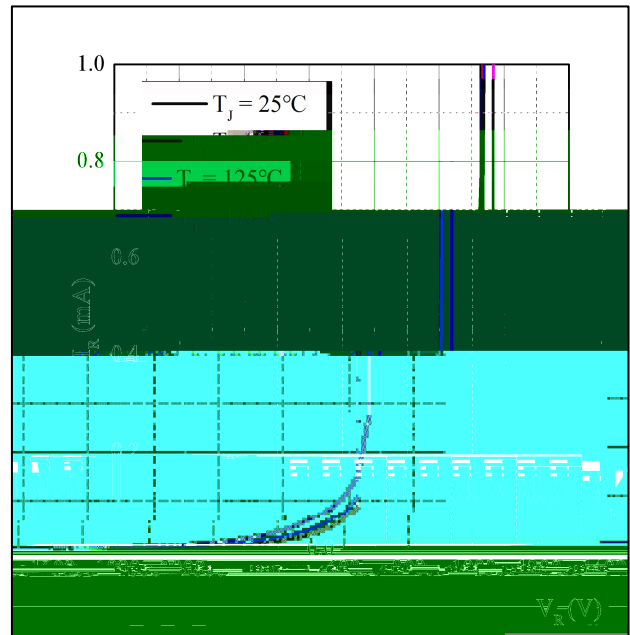


Figure 2: Reverse Characteristics

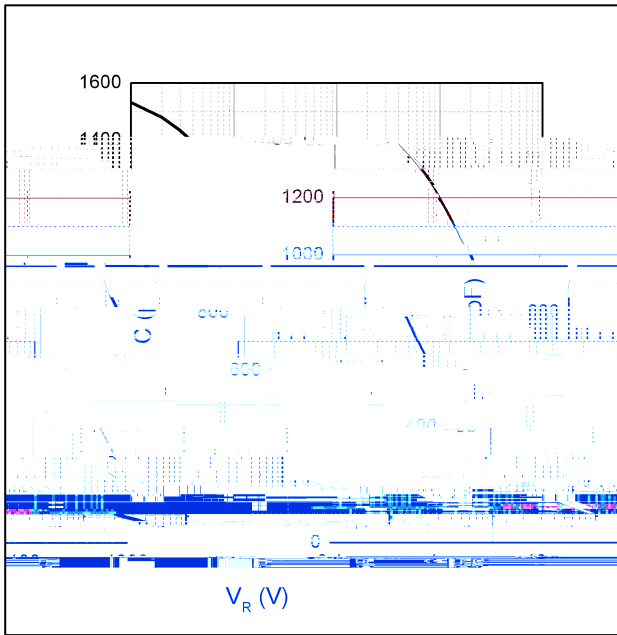


Figure 3: Capacitance vs. Reverse Voltage

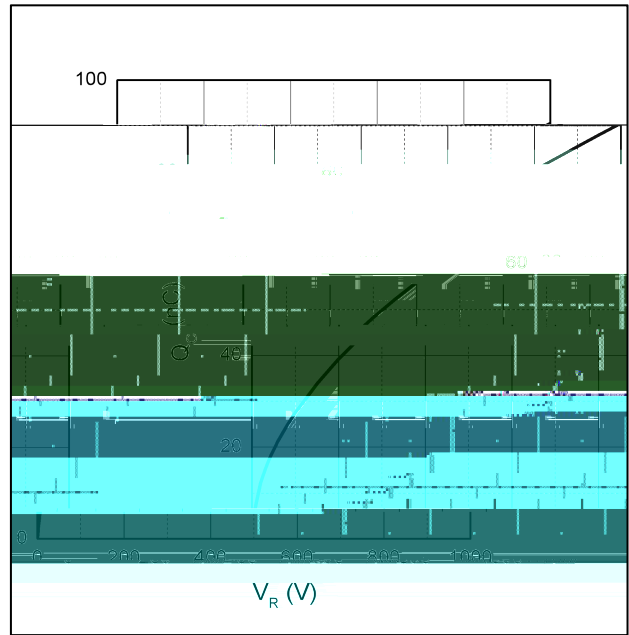


Figure 4: Recovery Charge vs. Reverse Voltage

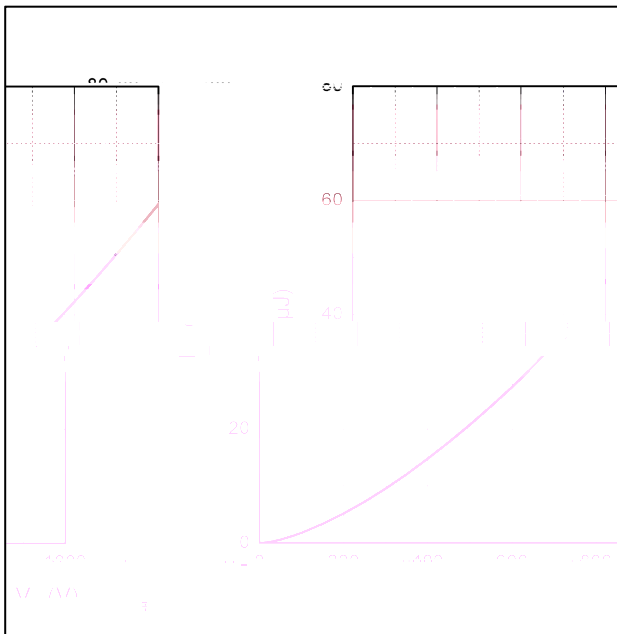


Figure 5: Typical Capacitance Stored Energy

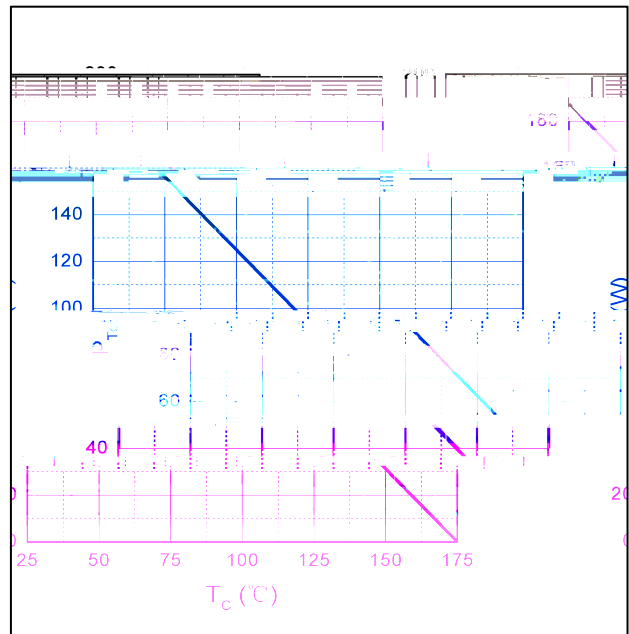
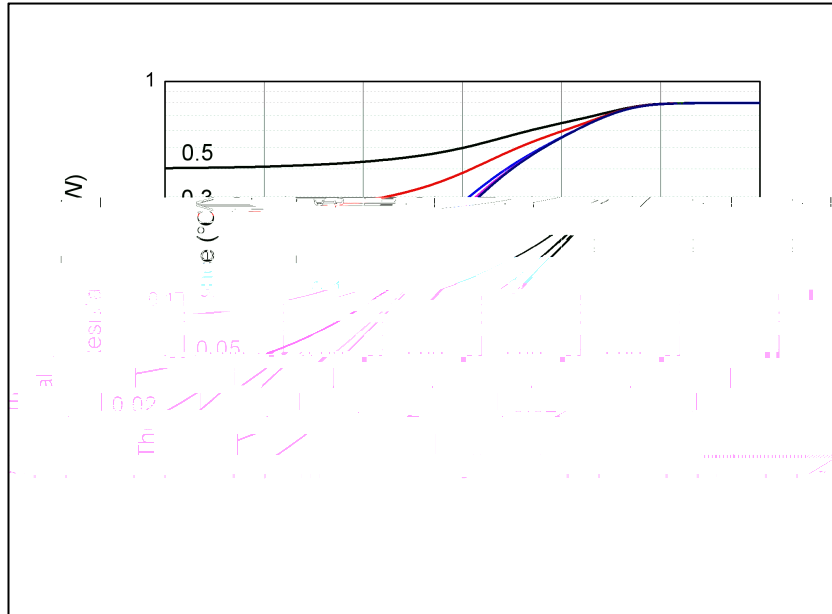


Figure 6: Power Derating



Figure

1.

The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as t ,**ma**