

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	135	39SPA135/A
			150	39SPA150/A
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form	30	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	570	A

Electrical Characteristics:

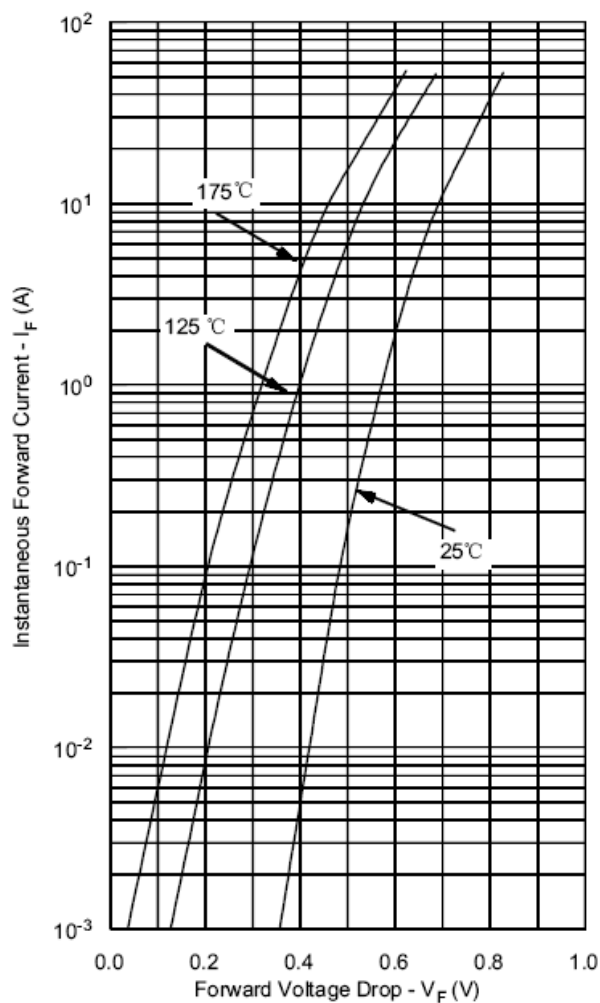
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 30A, Pulse, $T_J = 25\text{ }^\circ\text{C}$	0.84	V
	V_{F2}	@ 30A, Pulse, $T_J = 125\text{ }^\circ\text{C}$	0.68	V
Max. Reverse Current*	I_{R1}	@ $V_R = \text{rated } V_R$, Pulse, $T_J = 25\text{ }^\circ\text{C}$	1.0	mA
	I_{R2}	@ $V_R = \text{rated } V_R$, Pulse, $T_J = 125\text{ }^\circ\text{C}$	15	mA
Max. Junction Capacitance	C_T	@ $V_R = 5\text{V}$, $T_C = 25\text{ }^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV(p-p)}$	1000	pF

* Pulse Width < 300 μ s, Duty Cycle < 2%

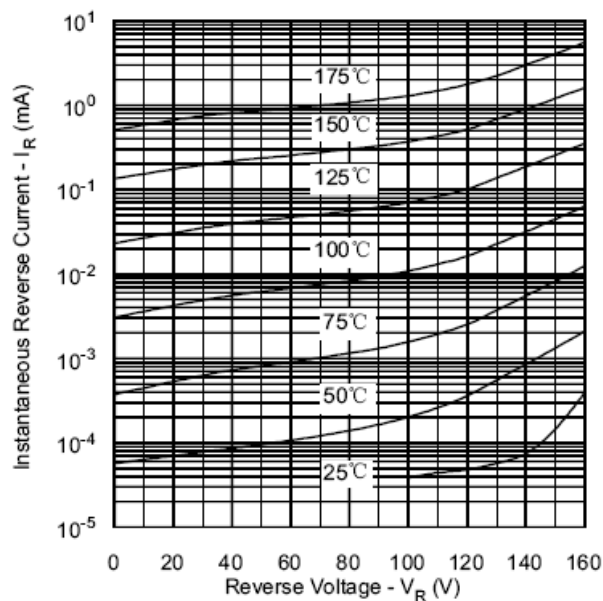
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +175	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	-55 to +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	0.50	$^\circ\text{C/W}$
Case Style	SPD-1/A			

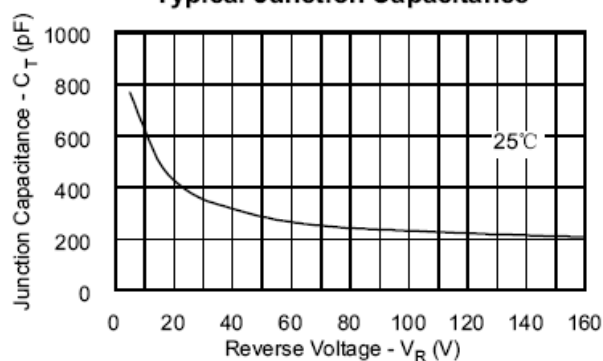
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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