

Voltage Ratings

Part number	1N7062CCT1
V _R Max. DC Reverse Voltage (V) (Per Leg)	100
V _{RWM} Max. Working Peak Reverse Voltage (V) (Per Leg)	

Absolute Maximum Ratings

Parameters	Limits	Units	Conditions
I _{F(AV)} Max. Average Forward Current See Fig. 5	35	A	50% duty cycle @ T _C = 112.5 °C, square waveform
I _{FSM} Max. Peak One Cycle Non - Repetitive Surge Current (Per Leg)	150	A	@ t _p = 8.3 ms half-sine

Electrical Specifications

Parameters	Limits	Units	Conditions
V _{FM} Max. Forward Voltage Drop (Per Leg) See Fig. 1①	0.76	V	@ 15A
	0.98	V	@ 30A
	1.06	V	@ 35A
	0.79	V	@ 15A
	1.01	V	@ 30A
	1.11	V	@ 35A
	0.71	V	@ 15A
	0.92	V	@ 30A
	0.99	V	@ 35A
I _{RM} Max. Reverse Leakage Current (Per Leg) See Fig. 2①	0.07	mA	T _J = 25°C
	40	mA	T _J = 125°C
C _T Max. Junction Capacitance (Per Leg)	1000	pF	V _R = 5V _{DC} (1MHz, 25°C)
L _S Typical Series Inductance (Per Leg)	7.8	nH	Measured from anode lead to cathode lead 6mm (0.025in.) from package

Thermal-Mechanical Specifications

Parameters	Limits	Units	Conditions
T _J Max. Junction Temperature Range	-65 to 150	°C	
T _{stg} Max. Storage Temperature Range	-65 to 150	°C	
R _{thJC} Max. Thermal Resistance, Junction to Case (Per Leg)	1.25	°C/W	DC operation See Fig. 4
R _{thJC} Max. Thermal Resistance, Junction to Case (Per Package)	0.63	°C/W	DC operation
wt Weight (Typical)	9.3	g	
Die Size (Typical)	150X180	mils	
Case Style	TO-254AA		

① Pulse Width < 300µs, Duty Cycle < 2%

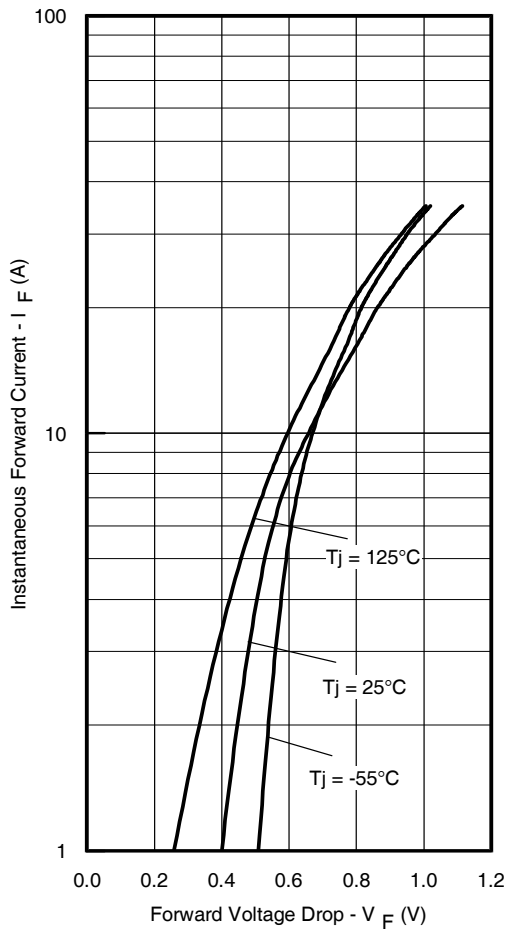


Fig. 1 - Max. Forward Voltage Drop Characteristics (Per Leg)

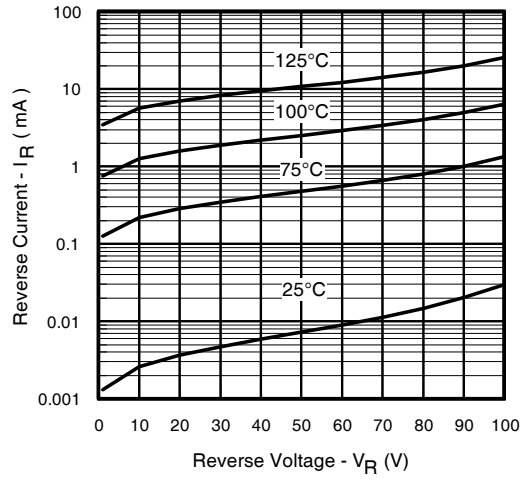


Fig. 2 - Typical Values of Reverse Current Vs. Reverse Voltage (Per Leg)

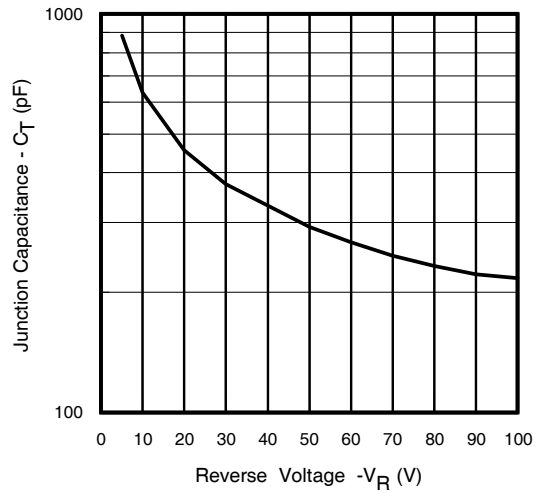


Fig. 3 - Typical Junction Capacitance Vs. Reverse Voltage (Per Leg)

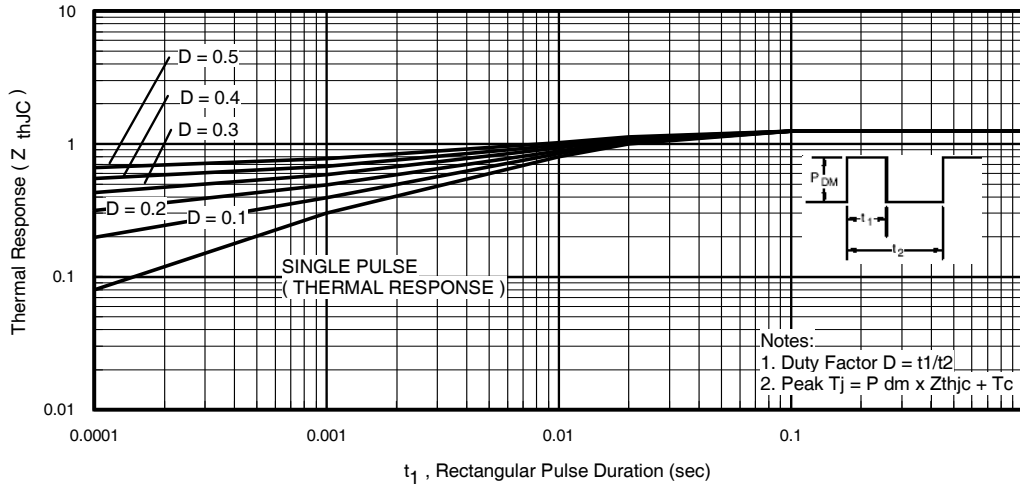


Fig. 4 - Max. Thermal Impedance Z_{thJC} Characteristics (Per Leg)

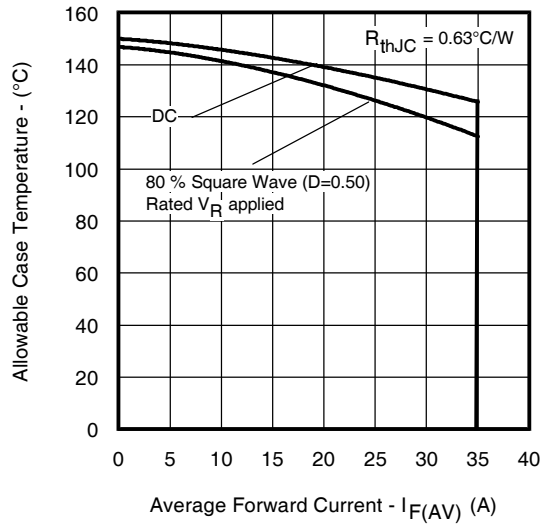


Fig. 5 - Max. Allowable Case Temperature Vs. Average Forward Current (Per Package)