






**THE DATASHEET OF
RL207**



SPECIFICATION SHEET

SPECIFICATION SHEET NO.	N0929-DO15RL2070A20A
DATE	Sept. 29, 2021
REVISION	A0
DESCRIPTION	<p>Axial Lead General Purpose Silicon Rectifier, DO-15 series, RL207 Type 2 Pins</p> <p>Reverse Voltage 1000V Max. Forward Current 2.0A Max.</p> <p>Operating Temp. Range -50°C ~+150°C</p> <p>Package in AMMO Pack, 2500pcs/Tape, Tape/Box</p> <p>RoHS/RoHS III compliant</p>
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	MDD RL207
PART CODE	DO15RL2070A20A

VENDOR APPROVE			
Issued/Checked/Approved			
DATE: Sept. 29, 2021			

CUSTOMER APPROVE	
DATE:	

GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES



MAIN FEATURE

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- High forward surge current capability
- High temperature soldering guaranteed, 250 °C/10 seconds at terminals
- Low reverse leakage
- Construction utilizes void free molded plastic technique

APPLICATION

- For printed circuit board

RFQ

[Request For Quotation](#)

PART CODE GUIDE

DO15	RL2070	A	20A
1	2	3	4

- 1) **DO15**: Axial Lead General Purpose Silicon Rectifier, 2 Pins, DO-15 series
- 2) **RL2070**: Type Code for original part number RL207
- 3) **A**: Package code, Package in AMMO Pack, 2500pcs/Tape, Tape/Box
- 4) **20A**: Specification code for Forward Current 2.0A Max. Reverse Voltage 1000V Max.

MORE ITEMS AVAILABLE

DO15RL2010A205	DO15RL2020A210	DO15RL2030A220	DO15RL2040A240	DO15RL2050A260
DO15RL2060A280	DO15RL2070A20A			

GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES

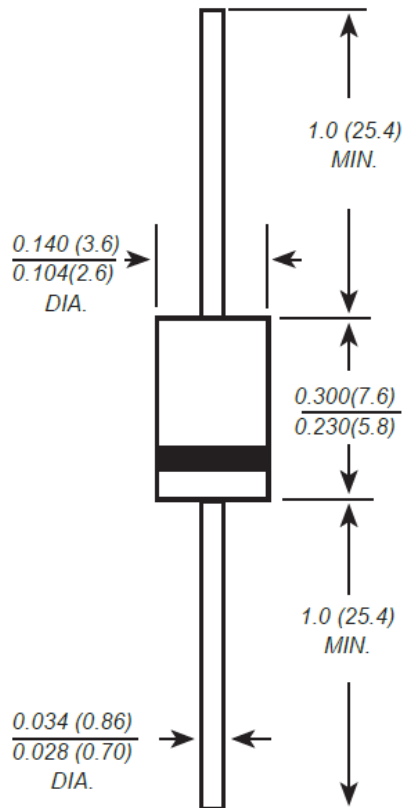
DIMENSION (Unit: Inch/mm)

Image for reference



Marking: RL207

DO-15



GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES
MECHANICAL DATA

Case	Terminals	Polarity	Mounting Position	Weight per piece
JEDEC DO-15 molded plastic body	Solder plated, Solderable per MIL-STD-750, Method 2026	Polarity symbol marking on case	Any	0.014 Ounce, 0.40grams

MAX. RATING & CHARACTERISTICS

Parameter	SYMBOLS	VALUE			UNITS
		Min.	Typical	Max.	
Repetitive peak reverse voltage	V _{RRM}			1000	Volts
RMS voltage	V _{RMS}			700	Volts
DC blocking voltage	V _{DC}			1000	Volts
Average forward output rectified current at TL= 75°C	I _{AV}			2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}			70.0	A
Instantaneous forward voltage at 2.0A	V _F			1.1	Volts
DC reverse current at rated DC blocking voltage	I _R			5.0	μA
				50	μA
Junction capacitance (Note 2)	C _J		20		pF
Thermal resistance (Note 3)	R _{QJA}		50		°C/W
Operating junction temperature range	T _J	-50		+150	°C
Storage temperature range	T _{STG}	-50		+150	°C

Note

- Ratings at 25 C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.
- Measured at 1.0MHz and applied reverse voltage of 4.0Voltage
- Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length, PCB. Mounted.

GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES

RELIABILITY

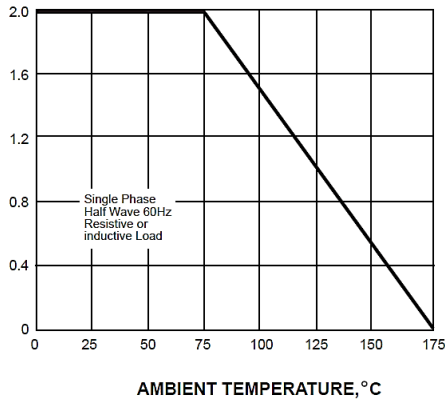
Number	Experiment Items	Experiment Method And Conditions	Reference Documents
1	Solder Resistance Test	Test 260°C± 5°C for 10 ± 2 sec. Immerse body into solder 1/16" ± 1/32"	MIL-STD-750D METHOD-2031.2
2	Solderability Test	230°C ±5°C for 5 sec.	MIL-STD-750D METHOD-2026.1 0
3	Pull Test	1 kg in axial lead direction for 10 sec.	MIL-STD-750D METHOD-2036.4
4	Bend Test	0.5Kg Weight Applied To Each Lead, Bending Arcs 90 °C ± 5 °C For 3 Times	MIL-STD-750D METHOD-2036.4
5	High Temperature Reverse Bias Test	TA=100°C for 1000 Hours at VR=80% Rated VR	MIL-STD-750D METHOD-1038.4
6	Forward Operation Life Test	TA=25°C Rated Average Rectified Current	MIL-STD-750D METHOD-1027.3
7	Intermittent Operation Life Test	On state: 5 min with rated IRMS Power Off state: 5 min with Cool Forced Air. On and off for 1000 cycles.	MIL-STD-750D METHOD-1036.3
8	Pressure Cooker Test	15 PSIG, TA=121°C, 4 hours	MIL-S-19500 APPENOIXC
9	Temperature Cycling Test	-55°C~+125°C; 30 Minutes For Dwelled Time 5 minutes for transferred time. Total: 10 cycles.	MIL-STD-750D METHOD-1051.7
10	Thermal Shock Test	0°C for 5 minutes., 100°C for 5minutes, Total: 10 cycles	MIL-STD-750D METHOD-1056.7
11	Forward Surge Test	8.3ms Single Sale Sine-wave One Surge.	MIL-STD-750D METHOD-4066.4
12	Humidity Test	TA=65°C, RH=98% for 1000 hours.	MIL-STD-750D METHOD-1021.3
13	High Temperature Storage life Test	150°C for 1000 Hours	MIL-STD-750D METHOD-1031.5

GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES

RATINGS AND CHARACTERISTIC CURVES (For Reference Only)

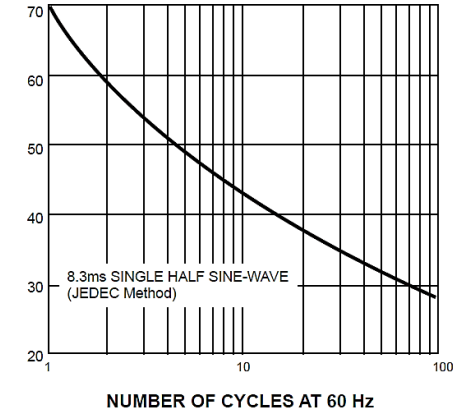
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



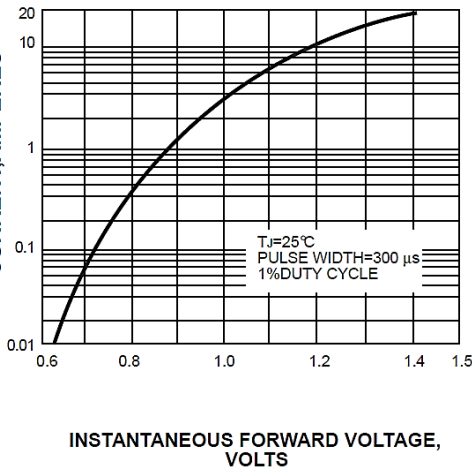
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



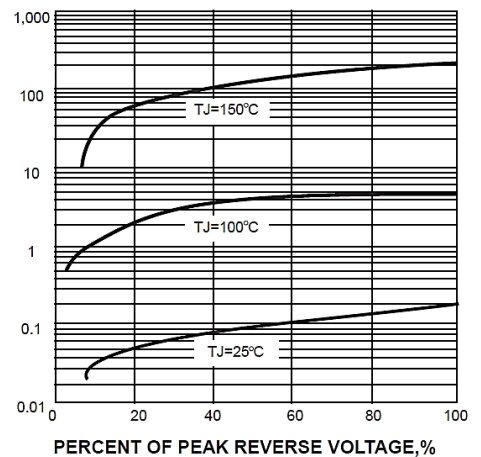
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



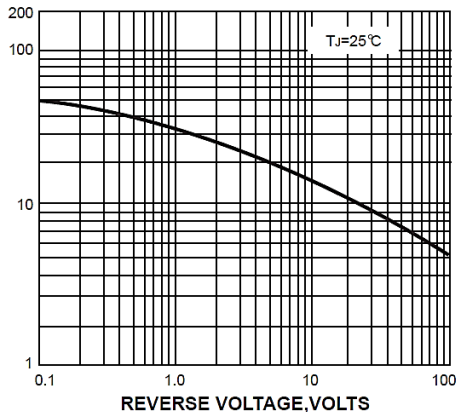
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



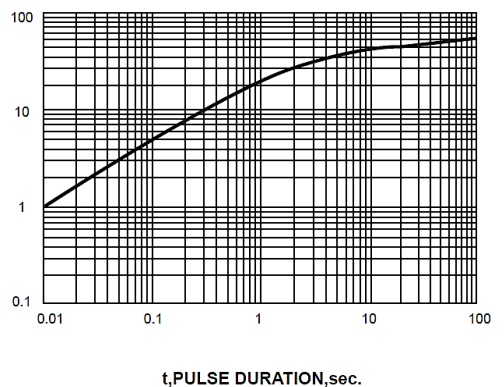
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

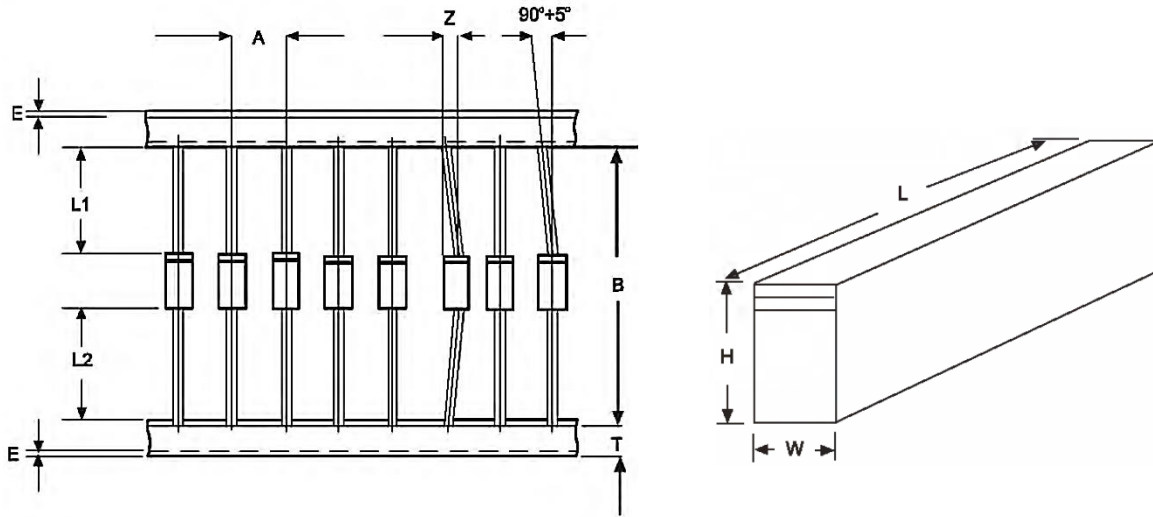
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES

AMMO BOX (Unit: mm)

- All Devices are packed in accordance with EIA standard RS-296-D and specifications.
- Each component lead shall be sandwiched between taps for A minimum of 3.2 mm (0.126")



Item	Symbol	DO-15 Uni(mm)	DO-15 Unit (Inch)
Component Alignment	Z	1.2 Max.	0.048 Max.
Tape Width	T	6.0 +/- 0.4	0.236 +/- 0.016
Exposed Adhesive	E	0.8 Max.	0.032 Max.
Body Eccentricity	L1 – L2	1.0 Max.	0.040 Max.
Component Pitch A (2.0mm/10 pitch)	A	10.0	0.197
Component Pitch B (2.0mm/10 pitch)	B	52.4	1.023
Component Pitch A (2.0mm/20 pitch)	-	-	-
Component Pitch B (2.0mm/20 pitch)	-	-	-
Box Length	L	450.0 +/- 5.0	17.72 +/- 0.197
Box Width	W	215.0 +/- 5.0	8.46 +/- 0.197
Box Height	H	250.0 +/- 5.0	9.84 +/- 0.197

GENERAL PURPOSE SILICON RECTIFIER DO-15 SERIES

AMMO PACK IN TAPE/BOX (Unit: mm)


Case Code	Qty. Per Reel (pcs)	Component Space (mm)	Tape Space (mm)	Inner Box L*W*H (mm)	Carton size L*W*H (mm)	Qty. Per Carton (pcs)	G. W (kg)
DO-15	500	10	52.4	260*150*80	470*270*320	2,500	9.9

DISCLAIMER

NextGen Component, Inc. reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information







Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View RL207 on WIN SOURCE](#)

 [MDD Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management