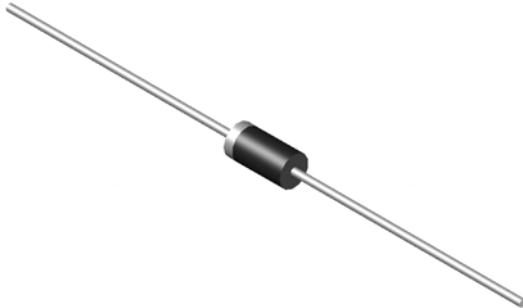


RL251 THRU RL257

General Purpose Rectifier

RoHS
COMPLIANT

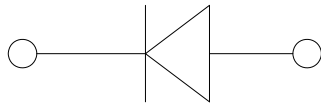


Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.



Mechanical Data

- **Package:** DO-204AC(DO-15)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:**Color band denotes cathode end

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	RL251	RL252	RL253	RL254	RL255	RL256	RL257
Device marking code									
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta =50°C	I _{F(AV)}	A	2.5						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C	I _{FSM}	A	120						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			240						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I ² t	A ² s	60						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j	pF	22						
Storage Temperature	T _{stg}	°C	-55 ~ +150						
Junction Temperature	T _j	°C	-55 ~ +150						

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RL251	RL252	RL253	RL254	RL255	RL256	RL257
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	2.5						
			T _j =125°C	50						

RL251 THRU RL257

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	RL251	RL252	RL253	RL254	RL255	RL256	RL257
Typical Thermal Resistance	R _{θJA}	°C/W	45						

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RL251~RL257	D1	Approximate 0.38	3000	3000	30000	Tape
RL251~RL257	C1	Approximate 0.38	500	500	25000	Bulk

■ Characteristics (Typical)

FIG.1: I_o-T_a Curve

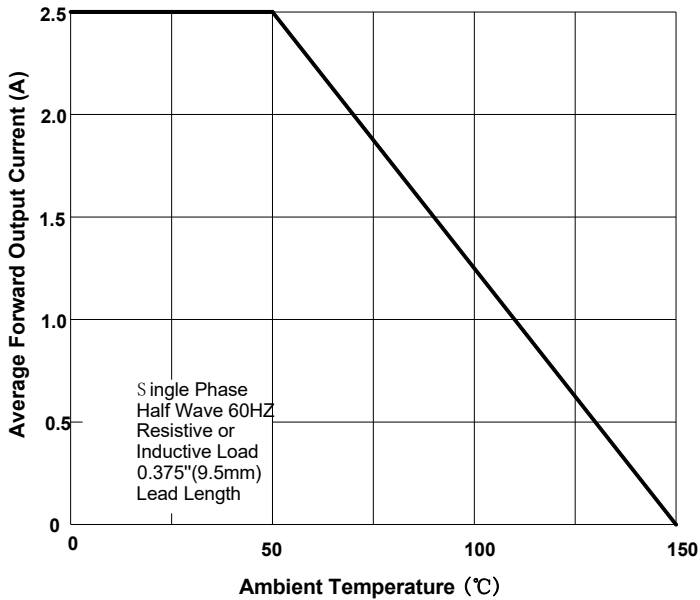


FIG.2: Forward Surge Current Capability

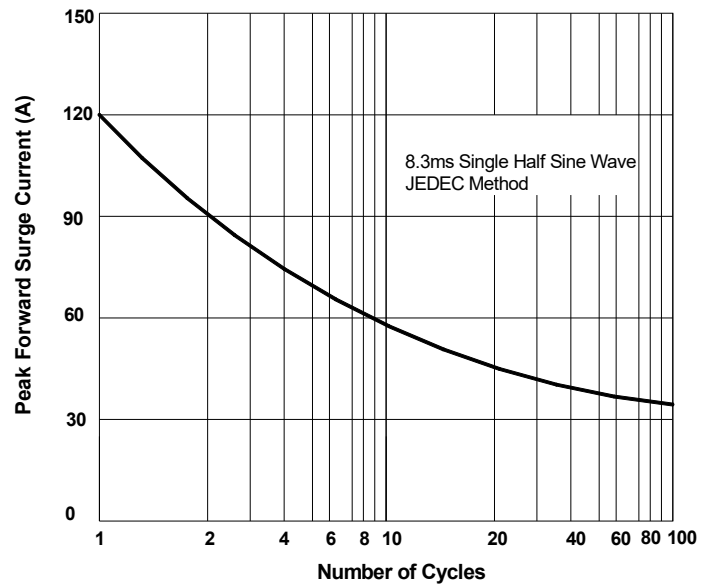


FIG.3: Forward Voltage

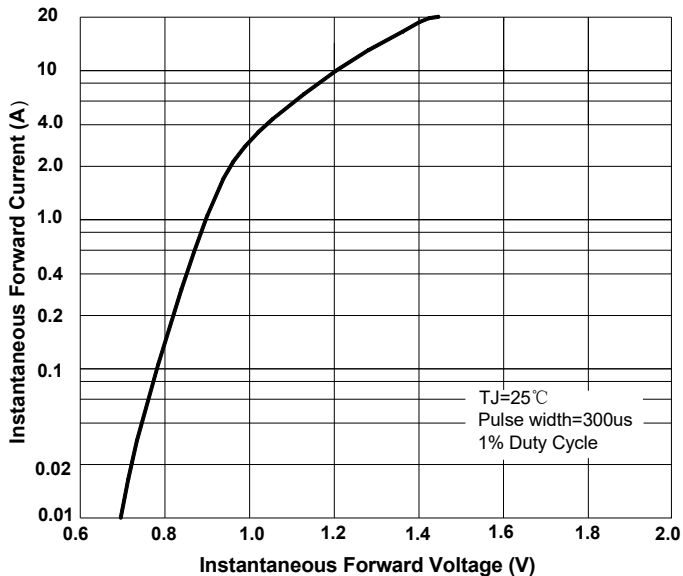
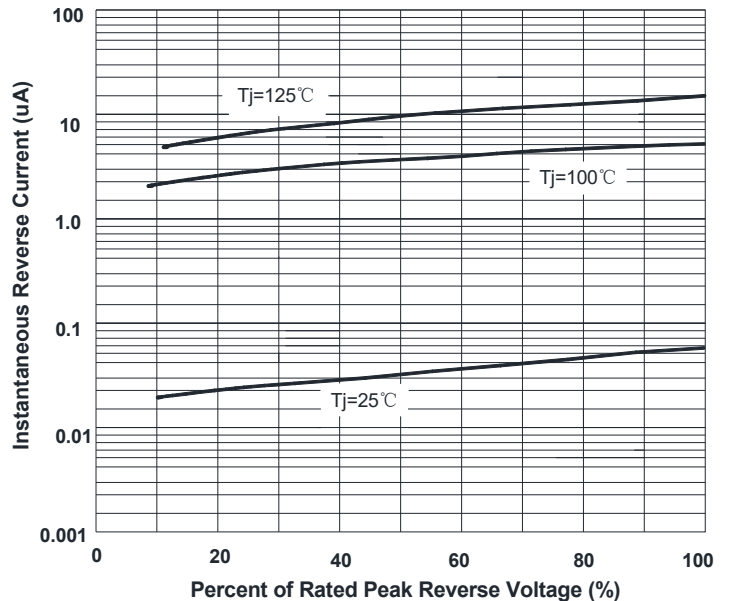
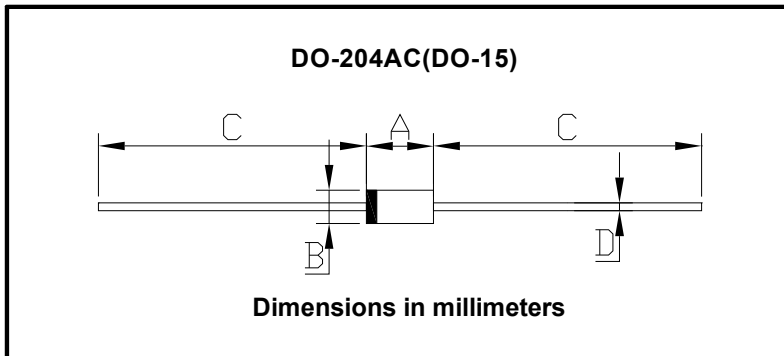


FIG.4: Typical Reverse Characteristics



RL251 THRU RL257

■ Outline Dimensions



DO-204AC(DO-15)		
Dim	Min	Max
A	5.80	7.60
B	2.60	3.60
C	25.4	/
D	0.70	0.90

Disclaimer

The information presented in this document is for reference only. Ningbo KLS Electronic Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), KLS or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.klsele.com>, or consult your nearest KLS's sales office for further assistance.