RL251G-RL257G GENERAL PURPOSE PLASTIC RECTIFIER

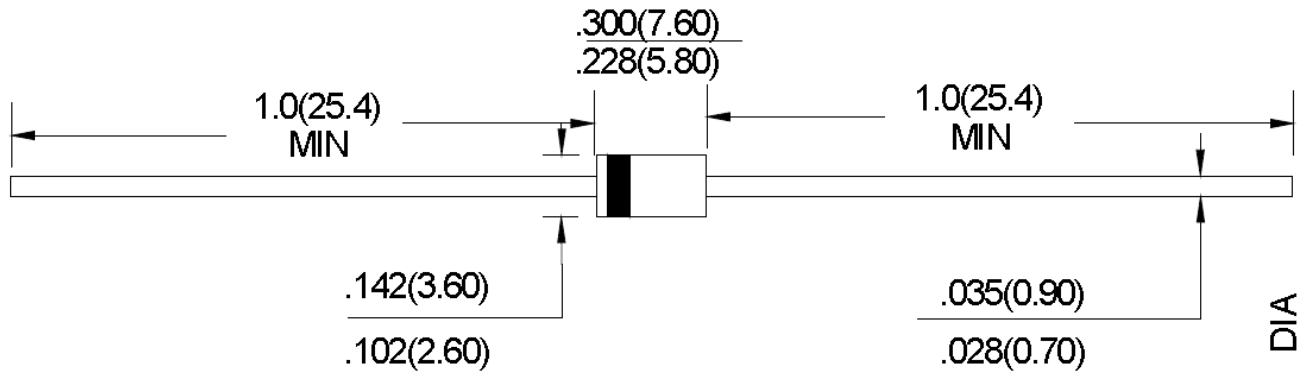
Features:

- **Low forward voltage drop**
- **Low leakage current**
- **High forward surge capability**
- **Solder Resistance 270°C / 7s, or 380°C / 3s**
- **Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Data:

- **Case: Molded plastic, DO-15**
- **Terminals: Axial leads, solderable per MIL-STD-750, method 2026**
- **Polarity: Color band denotes cathode end**
- **Mounting Position: Any**

Mechanical Dimensions: In mm



DO-15

Marking Diagram:

Where XXXXX is YYWWL

RL251G	= Part Name
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
RL251G-RL257G	DO-15 (Pb-Free)	3000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

PARAMETER	SYMBOL	RL251G	RL252G	RL253G	RL254G	RL255G	RL256G	RL257G	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375″(9.5mm) lead length at TA=75 ℃	$I_{(AV)}$	2.5							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120							Amps
Maximum instantaneous forward voltage at 2.5A	V_F	1.1							Volts
Maximum DC reverse current TA=25 ℃ at rated DC blocking voltage TA=100 ℃	I_R	2.5 50.0							μA
Typical junction capacitance (NOTE 1)	C_J	45.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	45.0							℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance from junction to ambient at 0.375″ (9.5mm)lead length,P.C.B. mounted

FIG.1 FORWARD CURRENT DERATING CURVE

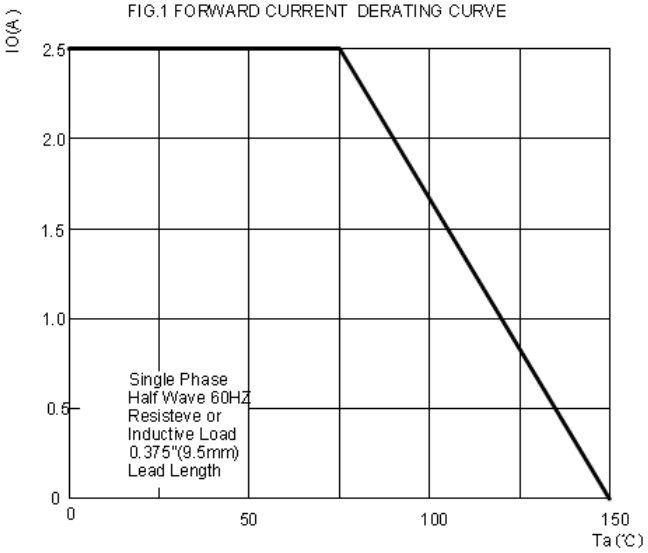


FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

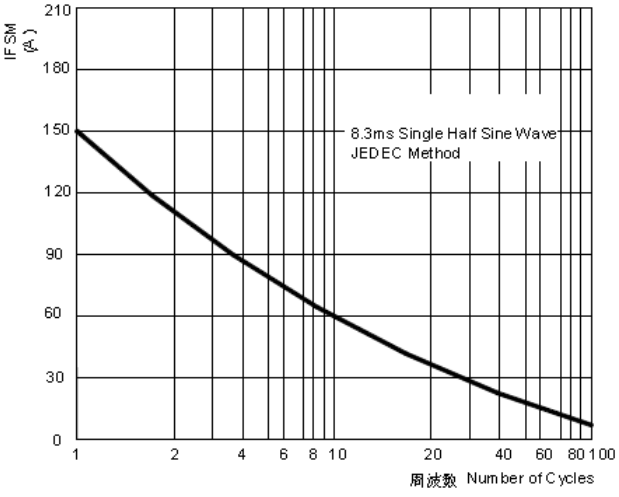


FIG.3TYPICAL FORWARD CHARACTERISTICS

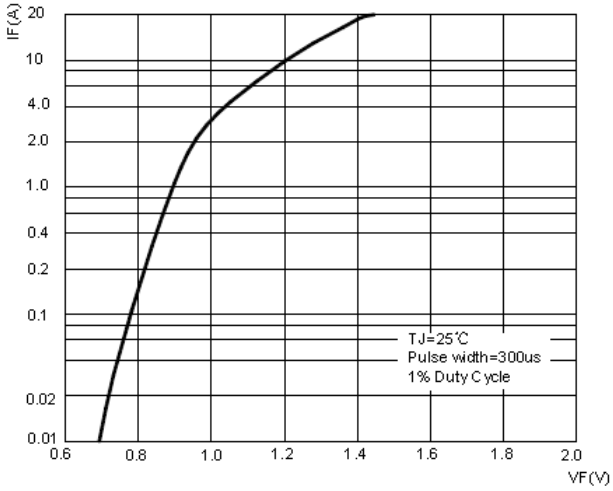


FIG.4TYPICAL REVERSE CHARACTERISTICS