

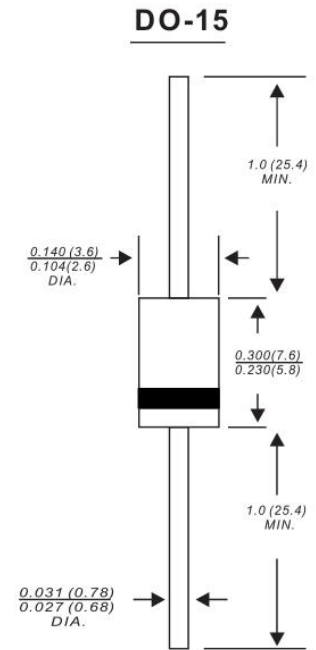
SR220L THRU SR2200L
VOLTAGE RANGE 20 to 200 Volts
CURRENT 2.0 Ampere

Features

- Fast switching speed
- Low forward voltage
- Low power high efficiency
- High surge capability
- High temperature soldering guaranteed
250°C/10 seconds, 0.373"(9.5mm) lead length

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead :Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.012ounce, 0.39 grams



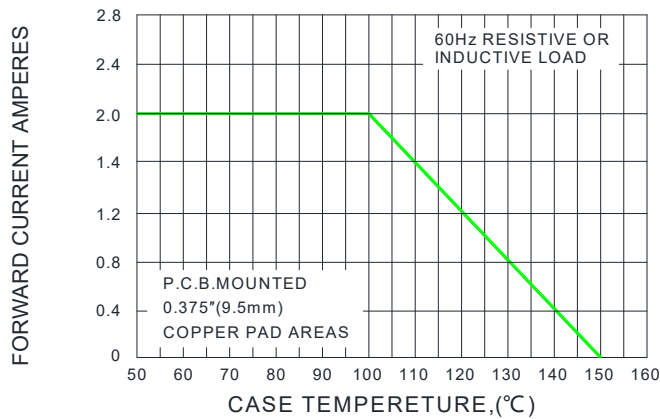
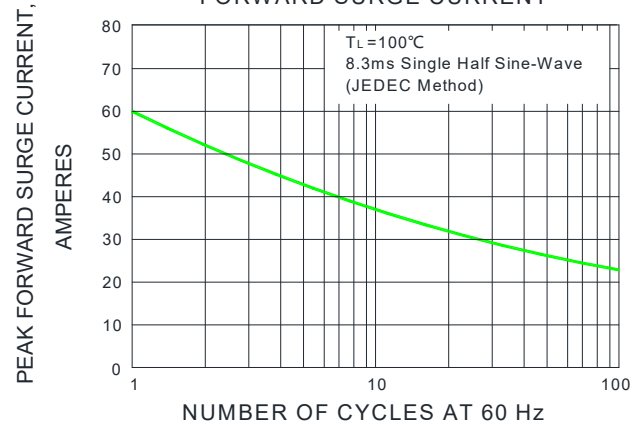
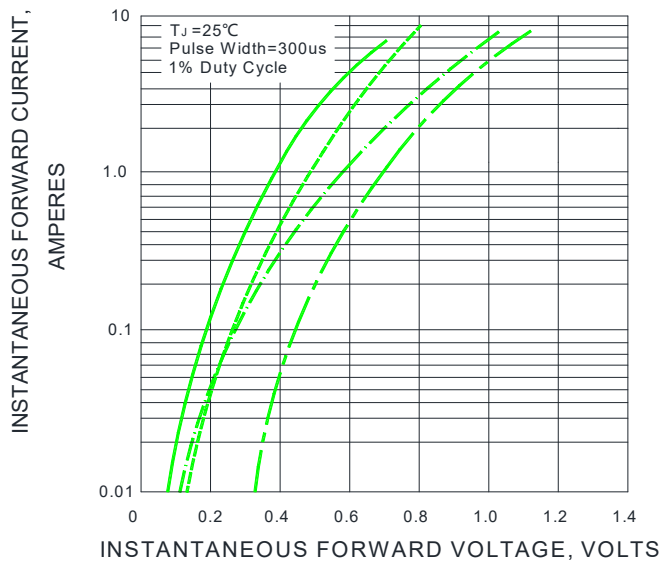
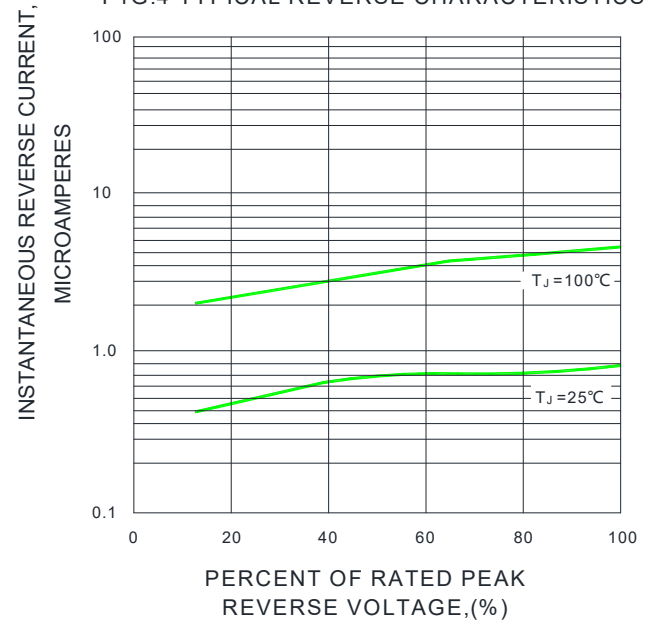
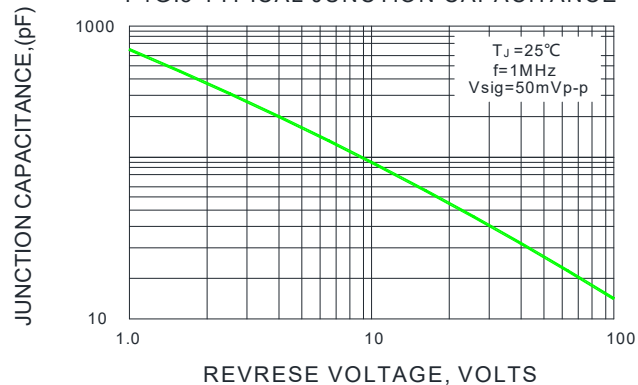
Maximum Ratings and Electrical Characteristics

- Ratings at 25°C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

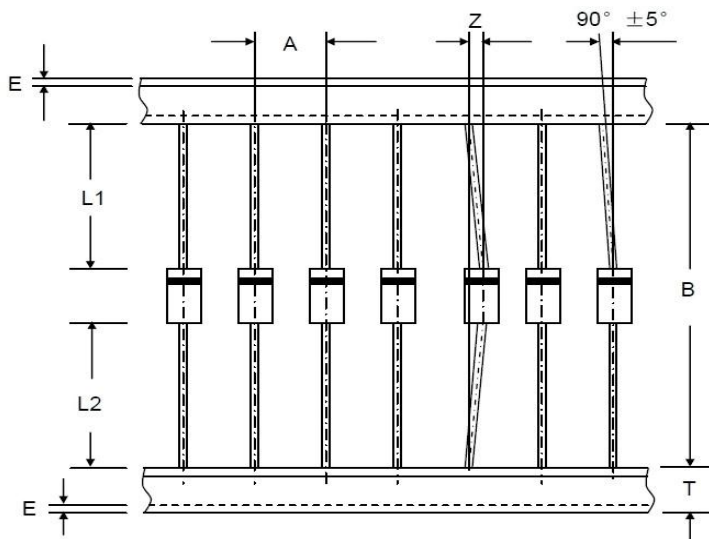
TYPE NUMBER		SYMBOL LS	SR2 20L	SR2 40L	SR2 60L	SR2 80L	SR2 100L	SR2 150L	SR2 200L	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS Voltage		V _{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage		V _{DC}	20	40	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at TLsee figure 1 TL =100°C		I _(AV)	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	60							Amps
Maximum Instantaneous Forward Voltage @ 2.0A ^(Note1)		V _F	0.45		0.55	0.70		0.85		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T _A = 25°C	I _R	0.5					0.15		mA
	T _A = 100°C		20			10		1.5		
Typical thermal resistance ^(NOTE 2)		R _{θJA}	40							°C/W
		R _{θJL}	13							
Operating Junction Temperature		T _J	(-55 to +150)							°C
Storage Temperature Range		T _{STG}	(-55 to +150)							°C

Notes:

1. Pulse test: 300μs pulse width, 1% duty cycle.
2. Thermal Resistance from junction to Ambient at .375"(9.5mm) lead length, P.C. board mounted.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)
**F1G.1-FORWARD CURRENT
DERATING CURVE**

**F1G.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT**

**F1G.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS**

F1G.4-TYPICAL REVERSE CHARACTERISTICS

F1G.5-TYPICAL JUNCTION CAPACITANCE


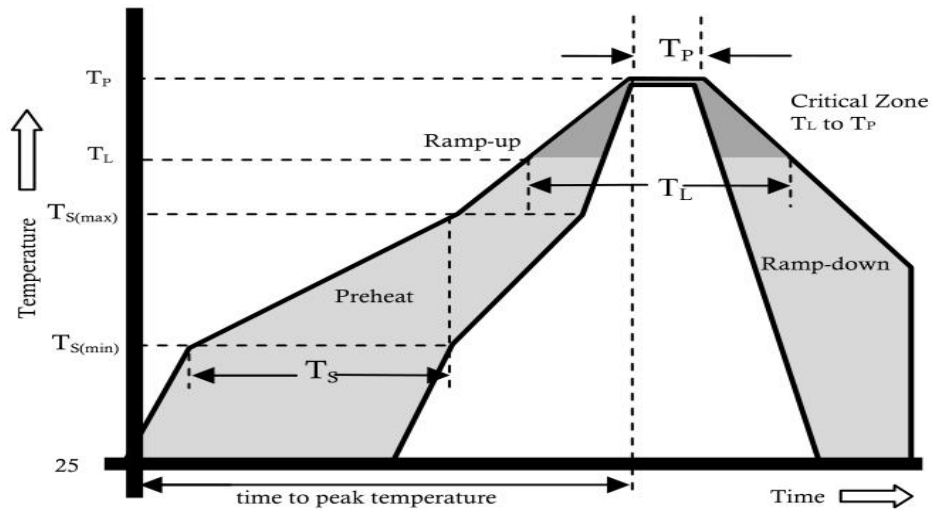
Axial Lead Taping Specifications for Rectifiers



Component Outline	Component Pitch A	Inner Tape Pitch B		Cumulative Tolerance
	±0.5mm	+0.5mm	-0.4mm	
DO-204AC(DO-15)	5.0mm	52.4mm	26.0mm	2.0mm/20pitch

Item	Symbol	Specifications(mm)	Specifications(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

Reflow Profile



Reflow Condition		Pb-Free Assembly
Pre Heat	Temperature Min.	+150°C
	Temperature Max.	+200°C
	Time(Min to Max)	60-180 secs.
Average ramp up rate(Liquidus Temp(T_L) to peak)		3°C/sec. Max.
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max.
Reflow	Temperature (T_L)(Liquidus)	+217°C
	Temperature (T_L)	60-150 secs.
Peak Temp (T_P)		+(260+0/-5)°C
Time within 5°C of actual Peak Temp (T_P)		25 secs.
Ramp-down Rate		6°C/sec. Max.
Time 25°C to peak Temp (T_P)		8 min. Max.
Do not exceed		+260°C