

Features

- Low power loss
- Guardring for overvoltage protection
- Extremely fast switching
- High frequency operation
- High forward surge capability
- Solder dip maximum peak of 275 °C /7s, per JESD 22-B106
- AEC-Q101 qualified available
- Automotive product No.: base P/N-H



Typical Application

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.



Mechanical Data

- Package: DO-204AL(DO-41)
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	Conditions	SR0						
				20	30	40	50	60	80	100
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100
Average Forward Current	I _{F(AV)}	A	60HZ Half-sine wave, Resistance load, Ta(FIG.1)	0.5						
Surge(Nonrepetitive)Forward Current	I _{FSM}	A	60HZ sine wave, 1 cycle, Ta=25°C	30						
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	Conditions	SR0					
				20	30	40	50	60	80
Peak Forward Voltage	V _{FM}	V	I _{FM} = 0.5A	0.55		0.7		0.85	
Peak Reverse Current	I _{RRM1}	mA	V _{RM} = V _{RRM}	Ta=25°C					
	I _{RRM2}			Ta=125°C					
Maximum reverse recovery time	T _{rr}	ns	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	TYP 4					
Thermal Resistance(Typical)	R _{θJ-A}	°C/W	Between junction and ambient	50					
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	110					



Characteristics (Typical)

FIG1: Forward Current Derating Curve

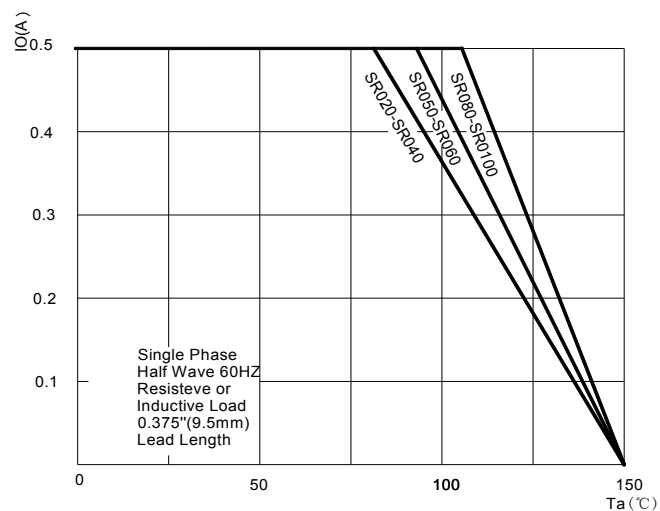


FIG2: Maximum Non-Repetitive Forward Surge Current

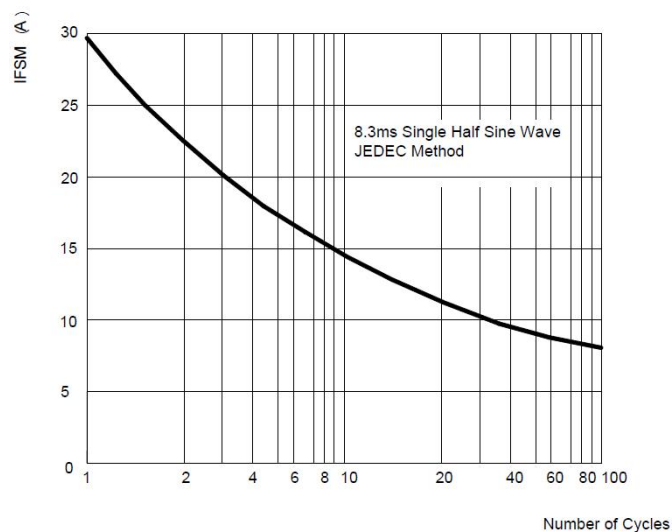


FIG3: Typical Forward Characteristics

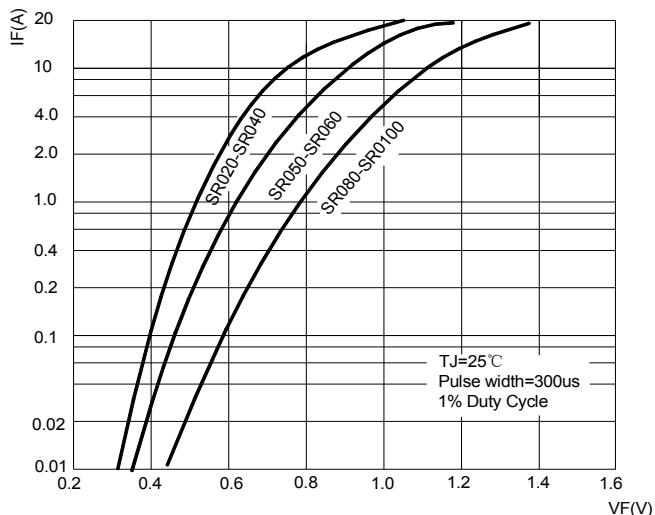
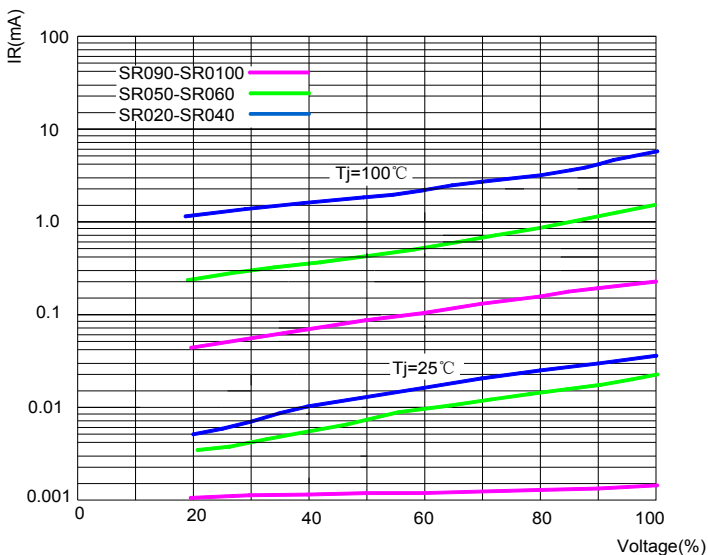


FIG4: Typical Reverse Characteristics





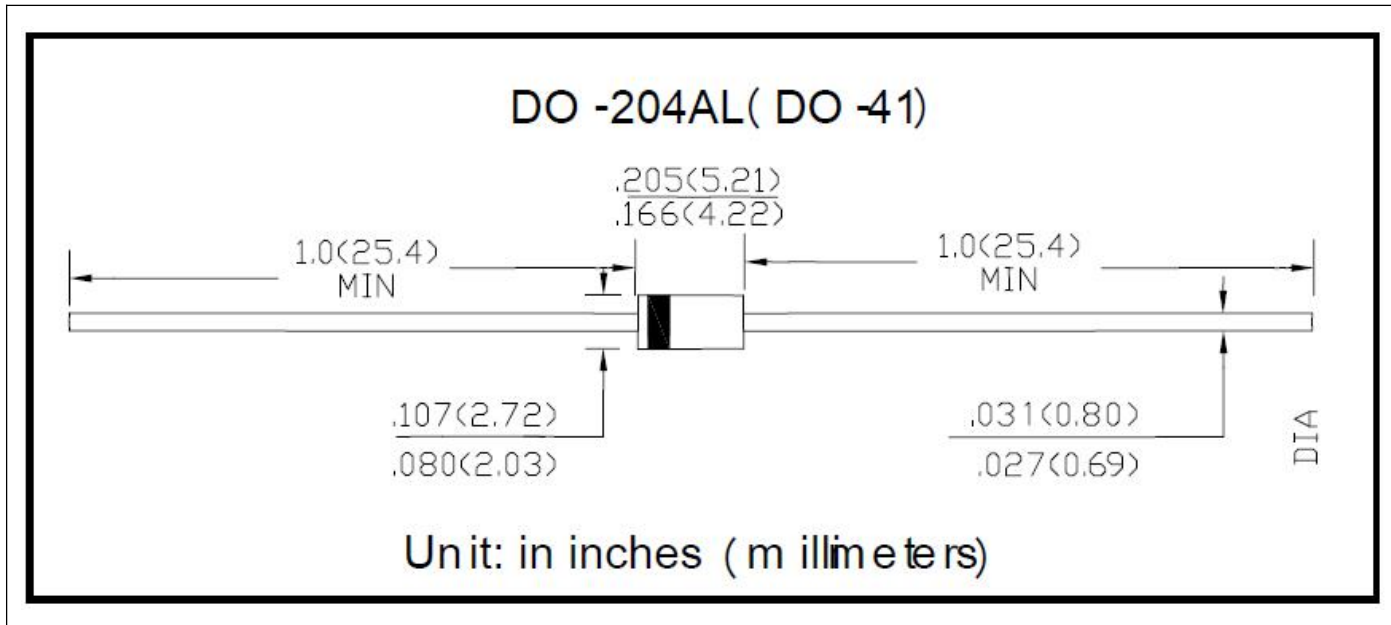
安美半导体
ANMEI Semiconductor

SR020 THRU SR0100

Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR020~SR0100	DO-204AL(DO-41)	5000	5000	50000	Tape

Outline Dimensions



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