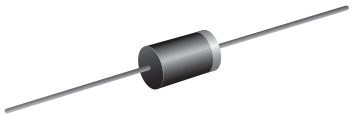
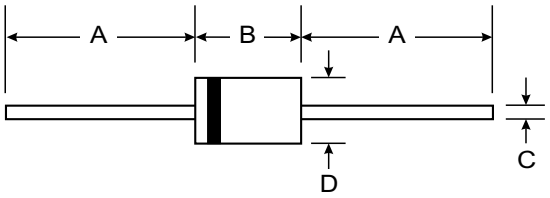
30PHA20

AXIAL LEADED SILICON RECTIFIER DIODES

VOLTAGE RANGE: 200V
CURRENT: 3.0 A





DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Features

- High VRM SBD
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

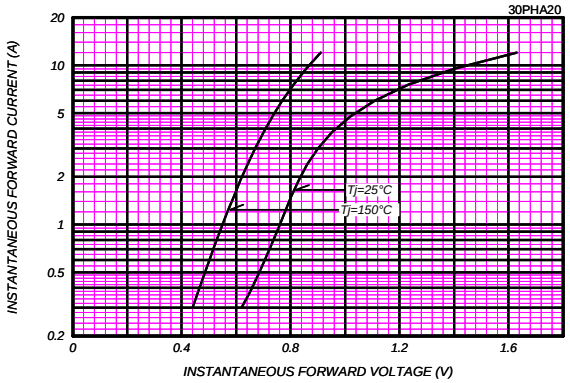
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Rating	Symbol	30PHA20			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200			V
Average Rectified Output Current	I_O	3.0	Tl=125°C (Tl:Lead Temperature)	50Hz Half Sine Wave Resistive Load	A
		1.4	Ta=36°C		
RMS Forward Current	$I_{F(RMS)}$	4.71			A
Surge Forward Current	I_{FSM}	60	50Hz Half Sine Wave,1cycle, Non-repetitive		A
Operating JunctionTemperature Range	Tjw	- 40 to + 150			°C
Storage Temperature Range	Tstg	- 40 to + 150			°C

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25°C, V_{RM}= V_{RRM}	-	-	200	μA
Peak Forward Voltage	V_{FM}	Tj= 25°C, I_{FM}= 3 A	-	-	0.90	V
Thermal Resistance	Rth(j-l)	Junction to Lead	-	-	8	°C/W
	Rth(j-a)	Junction to Ambient *			80	

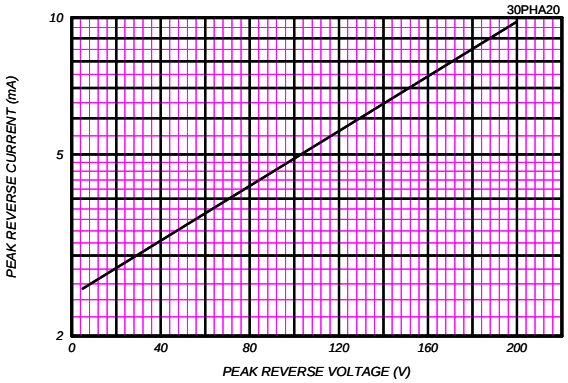
*: Print Lands 5x5mm, Both sides

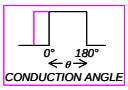
FORWARD CURRENT VS. VOLTAGE



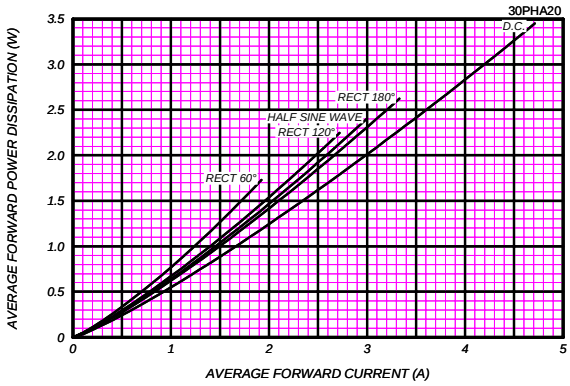
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C

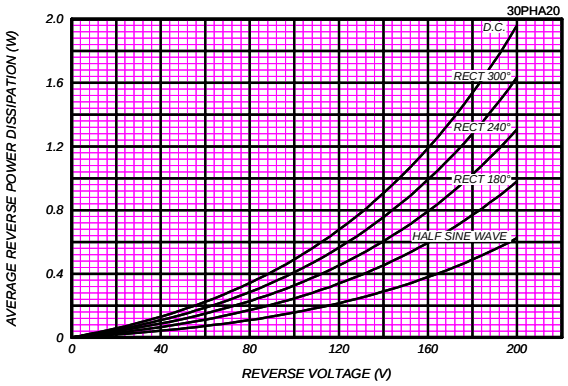


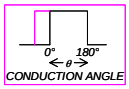


AVERAGE FORWARD POWER DISSIPATION



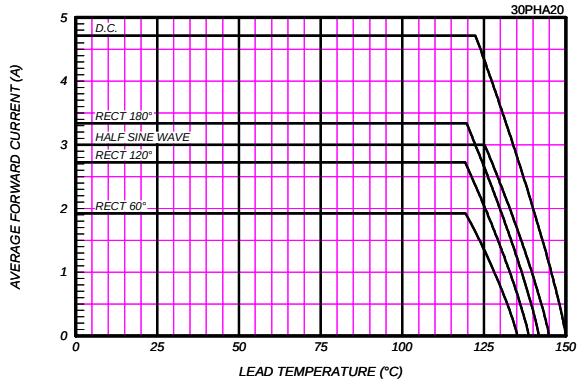
AVERAGE REVERSE POWER DISSIPATION





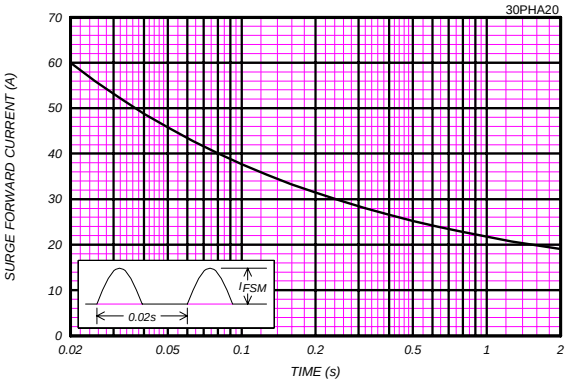
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

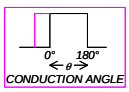
V_{RM}=200V



SURGE CURRENT RATINGS

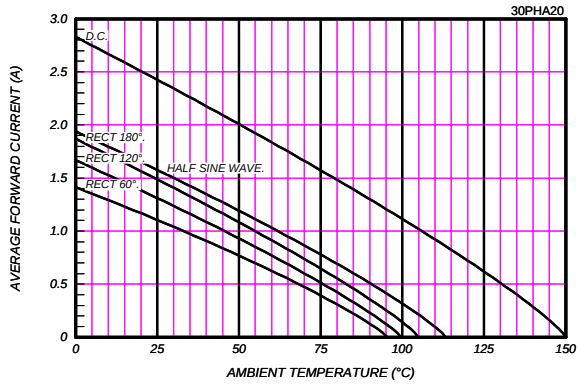
f=50Hz,Half Sine Wave,Non-Repetitive,No Load





AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board, V_{RM}=200V



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C,Vm=20mV_{RMS},f=100kHz,Typical Value