

20A 200V Cathode Common

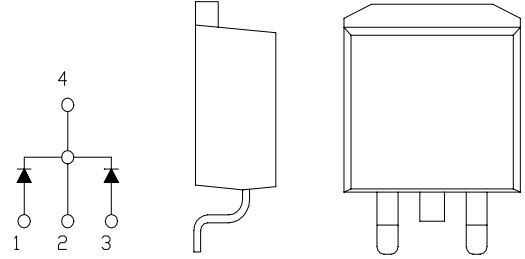
SBD Type : TCH20A20

OUTLINE DRAWING

For High Frequency Rectification

FEATURES

- * High VRM SBD
- * Low Forward Voltage Drop and Low Noise
- * Surface mounted package
- * Dual Diodes Cathode Common



Maximum Ratings

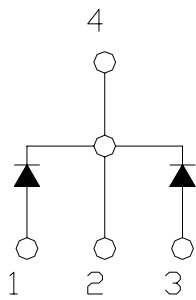
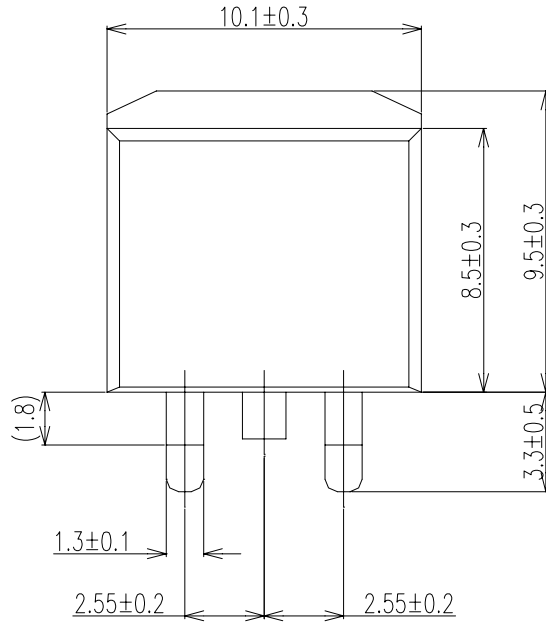
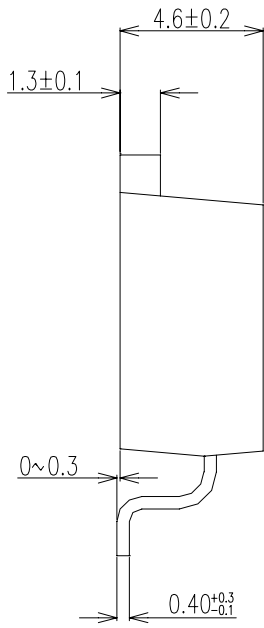
Approx Net Weight:1.4g

Rating	Symbol	TCH20A20		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200		V
Average Rectified Output Current	I_O	20	$T_c=118^{\circ}C$ 50 Hz, Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	22.2		A
Surge Forward Current	I_{FSM}	120	50 Hz Full Sine Wave, 1cycle Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	- 40 to + 150		$^{\circ}C$
Storage Temperature Range	T_{stg}	- 40 to + 150		$^{\circ}C$

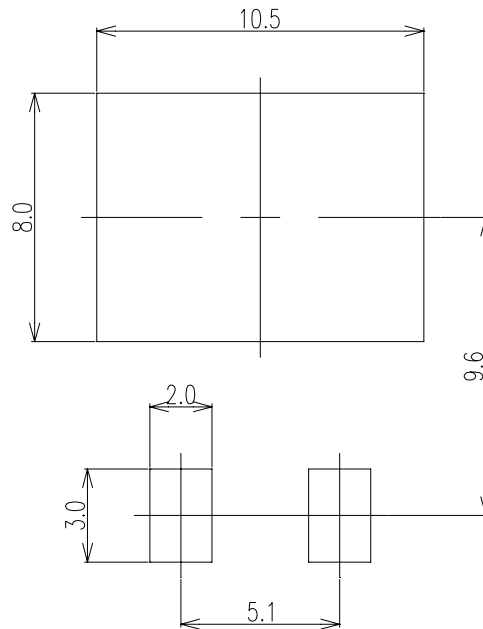
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Diode	-	-	200	μA
Peak Forward Voltage	V_{FM}	$T_j=25^{\circ}C, I_{FM}=10A$ per Diode	-	-	0.90	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^{\circ}C/W$

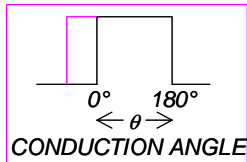
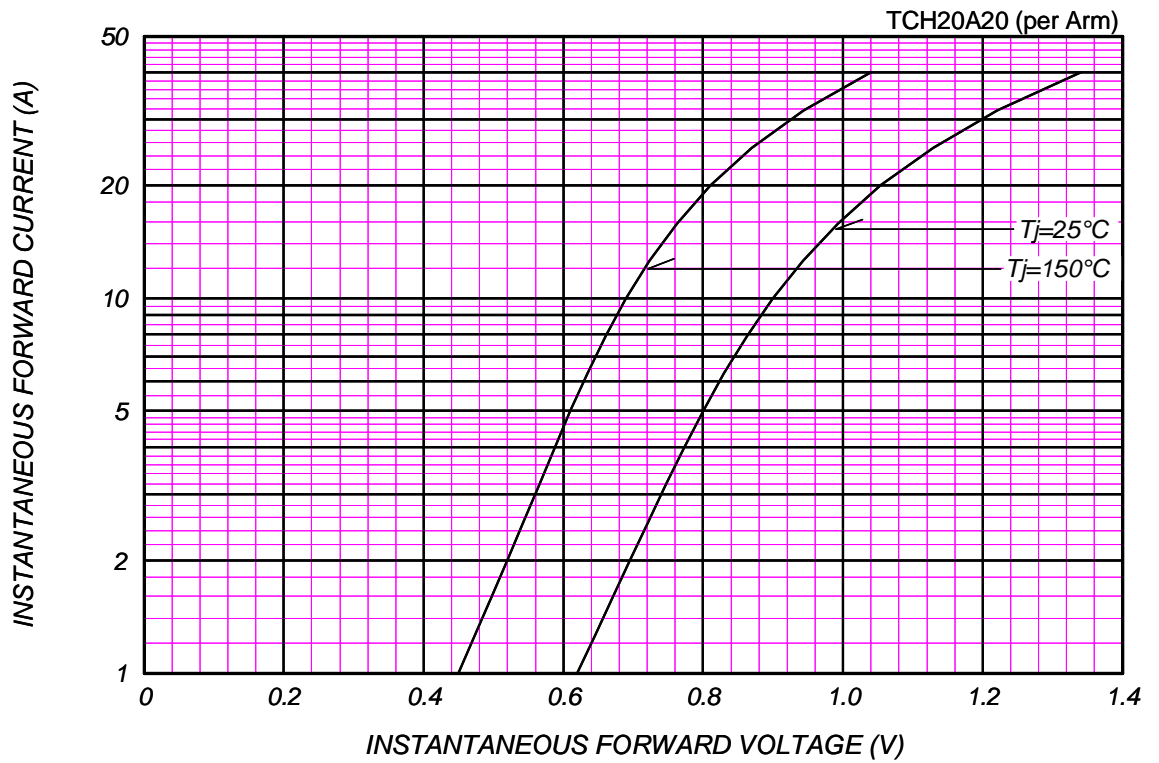
C_T_ OUTLINE DRAWING (Dimensions in mm)



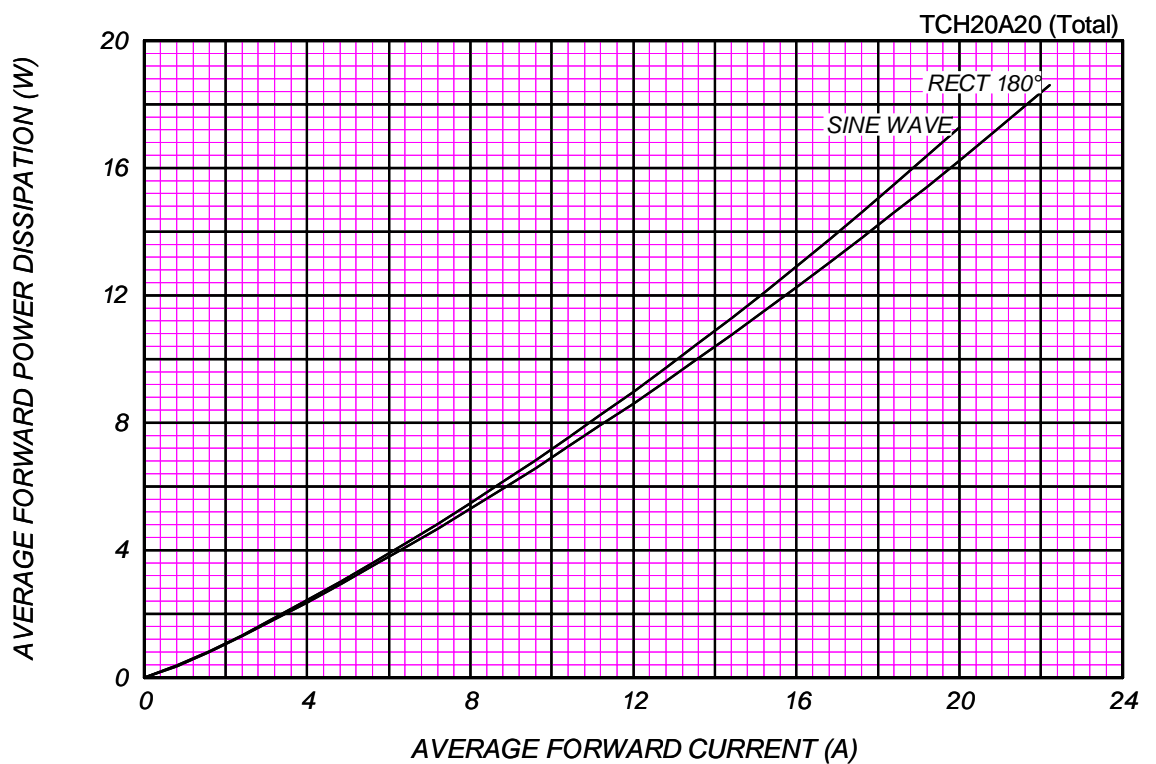
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



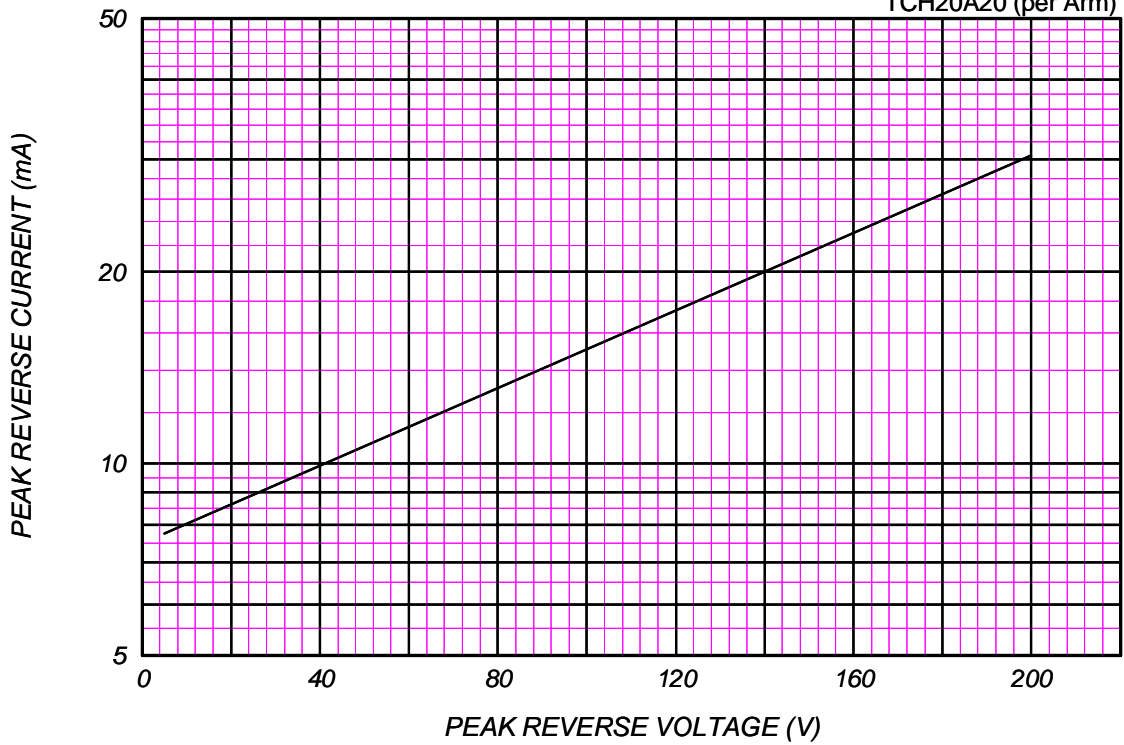
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

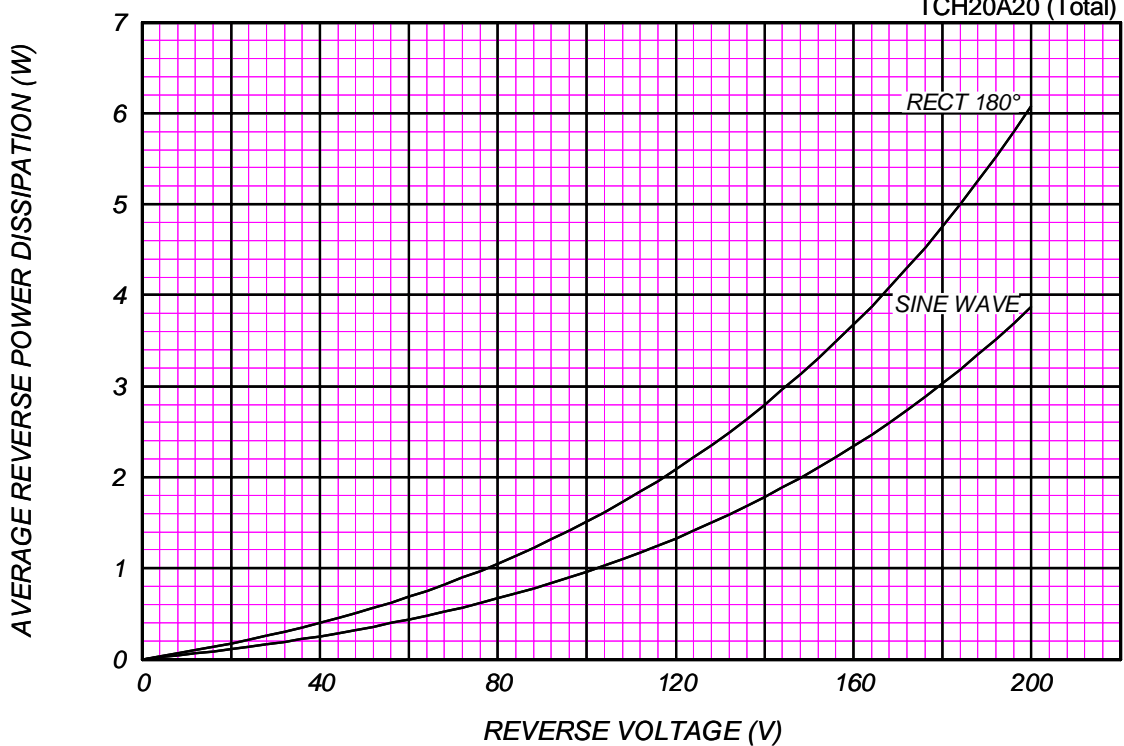
$T_j = 150\text{ }^\circ\text{C}$

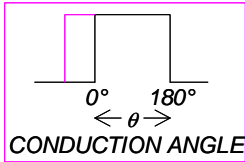
TCH20A20 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

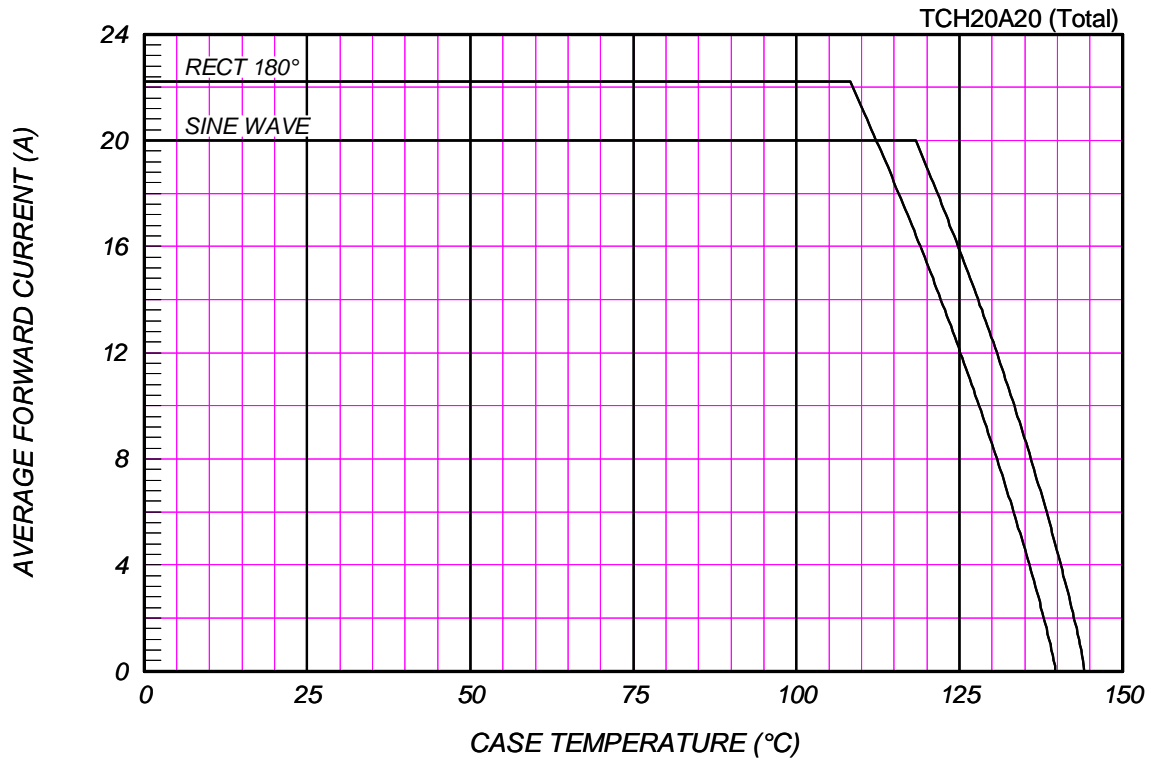
TCH20A20 (Total)





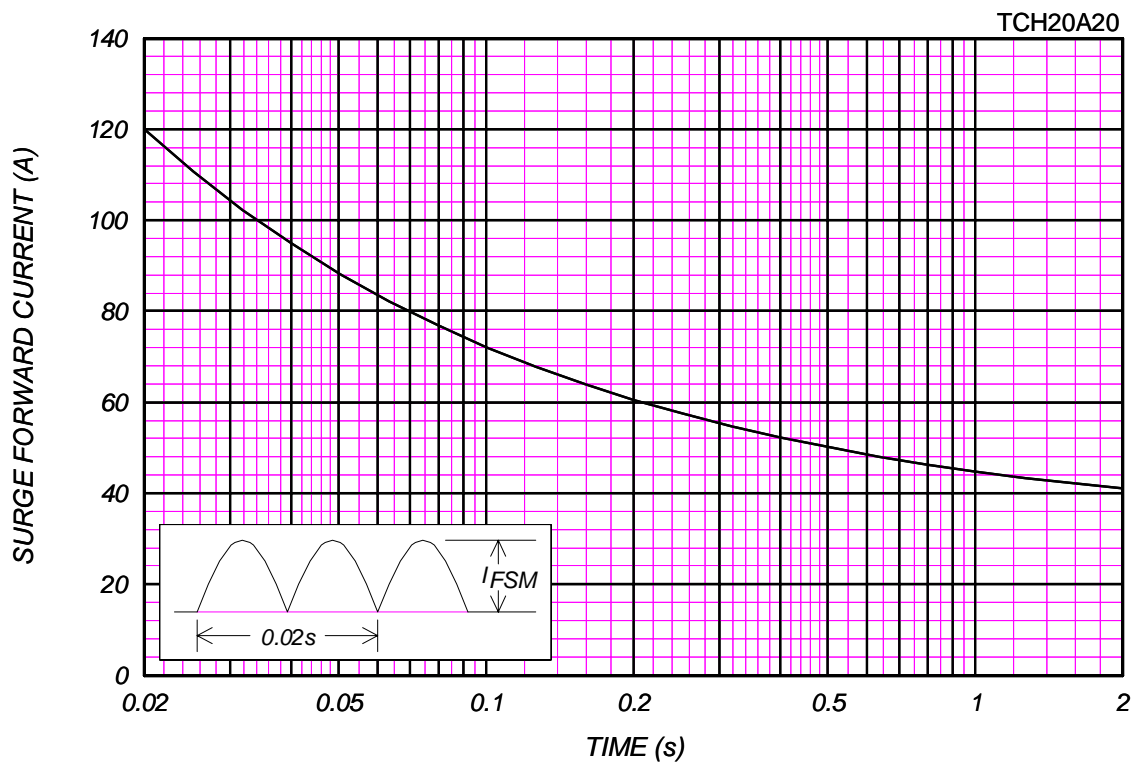
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=200V$



SURGE CURRENT RATINGS

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



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^{\circ}\text{C}$, $V_m=20\text{mV}_{\text{RMS}}$, $f=100\text{kHz}$, Typical Value

TCH20A20 (per Arm)

