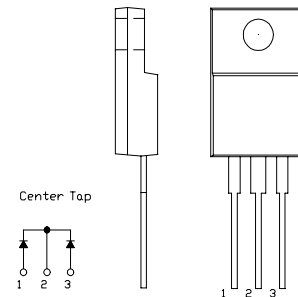


SBD Type : FCL30A015

OUTLINE DRAWING

FEATURES

- *TO-220AB Case
- *Fully Molded
- *Dual Diodes – Cathode Common
- *Extremely Low Forward Voltage Drop
- *Oring Diode
- *High Surge Capability



Maximum Ratings

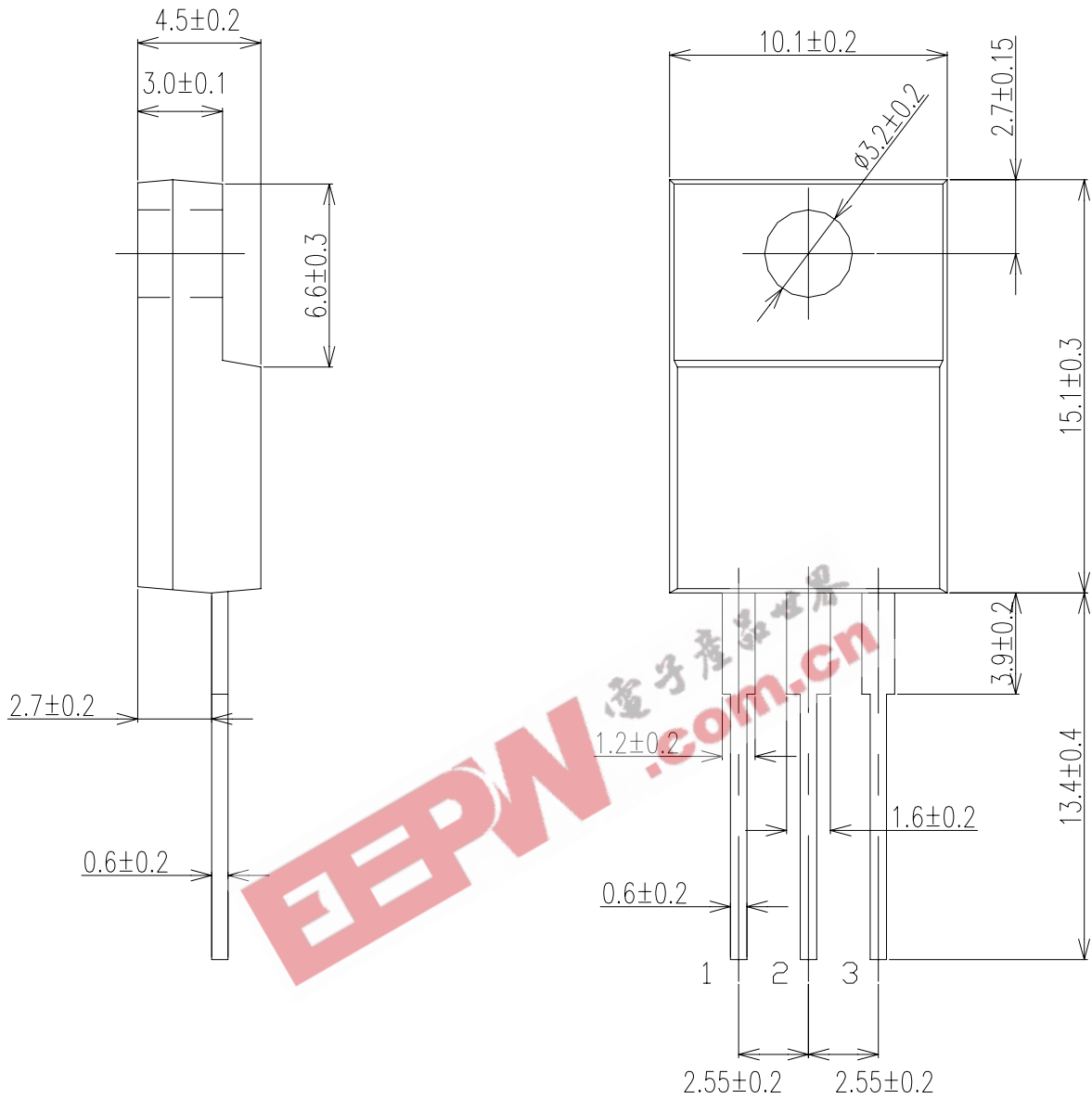
Approx Net Weight: 1.75g

Rating	Symbol	FCL30A015			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	15			V
Average Rectified Output Current	I_O	30	$T_c=78^{\circ}\text{C}$	50 Hz Full Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	33.3			A
Surge Forward Current	I_{FSM}	250	50Hz Full Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T_{jw}	-40 to +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125			$^{\circ}\text{C}$
Mounting torque	F_{tor}	recommended torque = 0.5			N•m

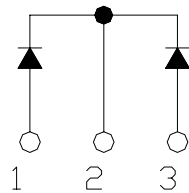
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}$, $V_{RM}= V_{RRM}$ per arm	-	-	15	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}$, $I_{FM}= 15\text{ A}$ per arm	-	-	0.42	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	1.5	$^{\circ}\text{C}/\text{W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	$^{\circ}\text{C}/\text{W}$

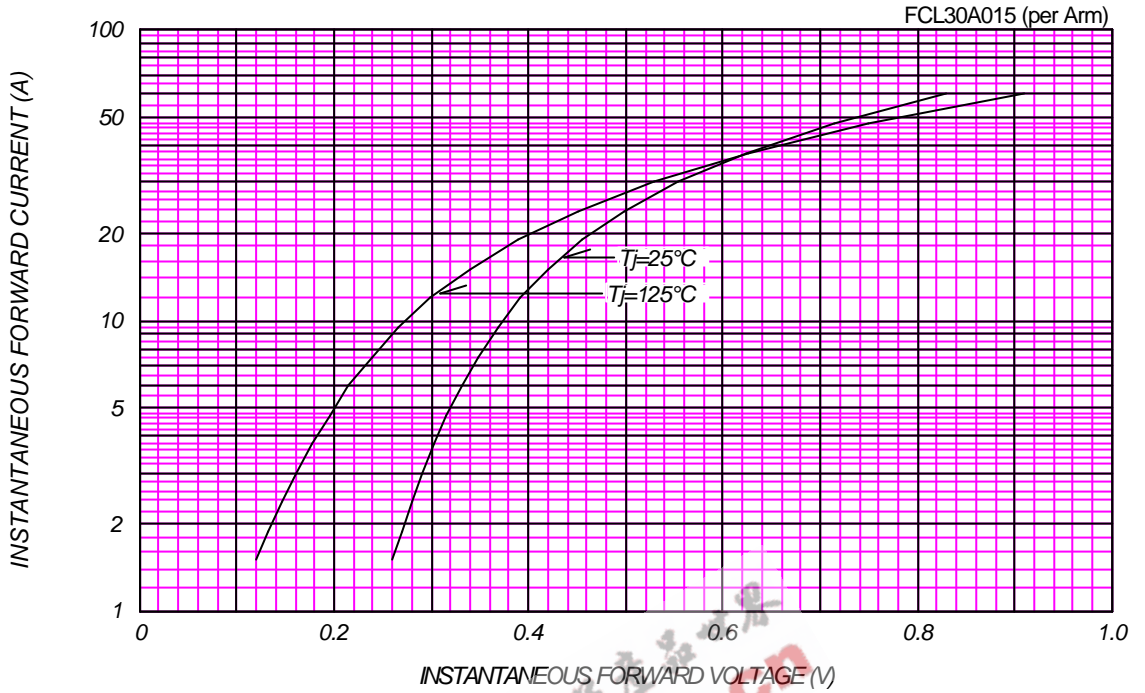
FCL_A_ OUTLINE DRAWING (Dimensions in mm)



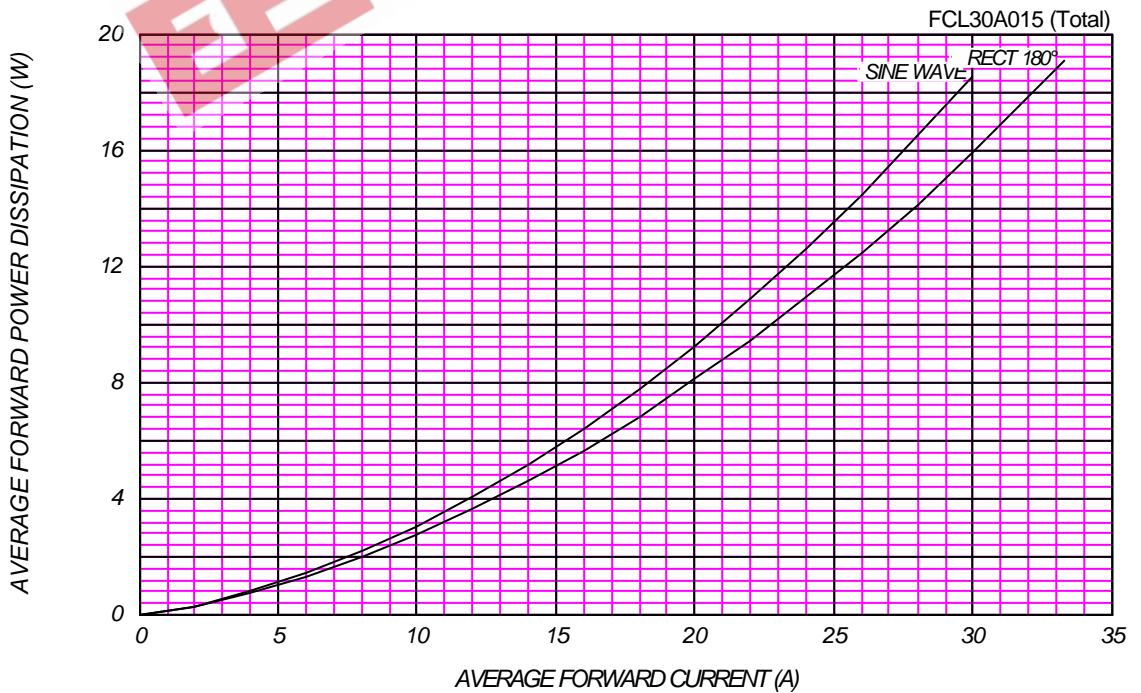
Center Tap



FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

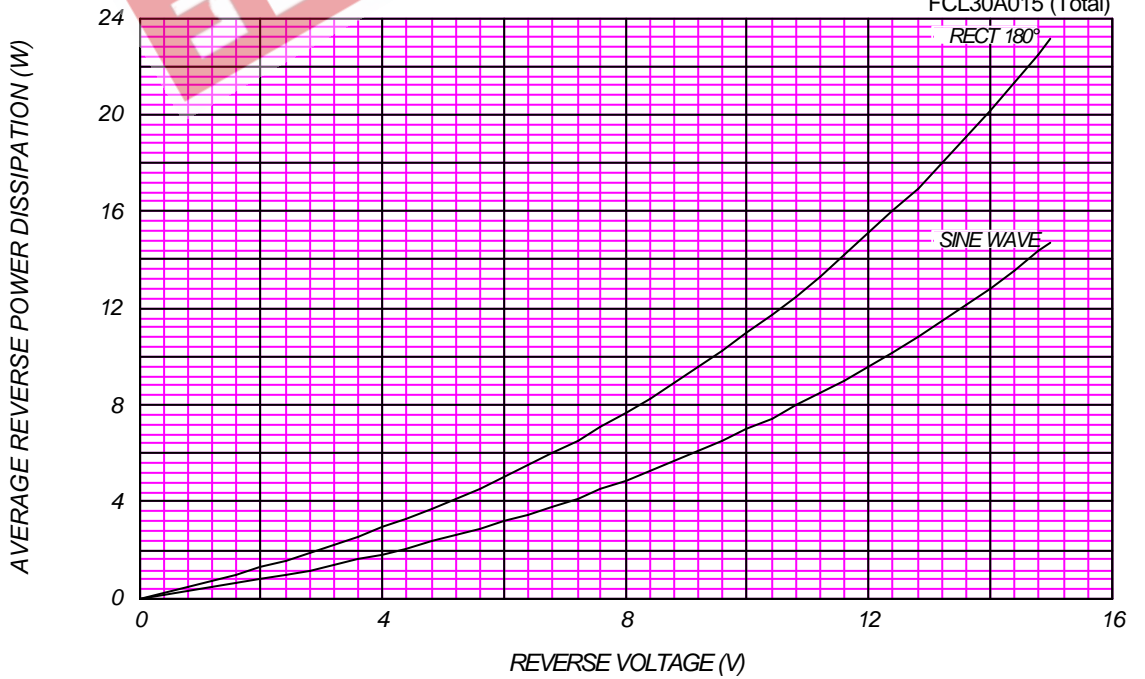
T_j = 125 °C

FCL30A015 (per Arm)



AVERAGE REVERSE POWER DISSIPATION

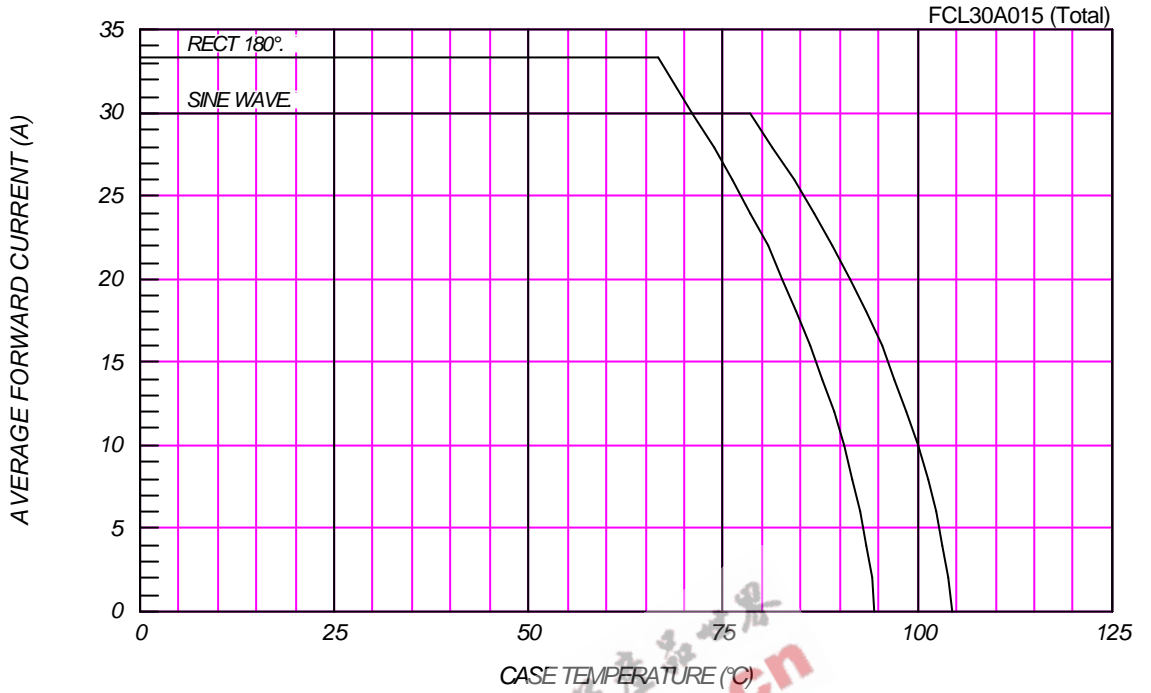
FCL30A015 (Total)





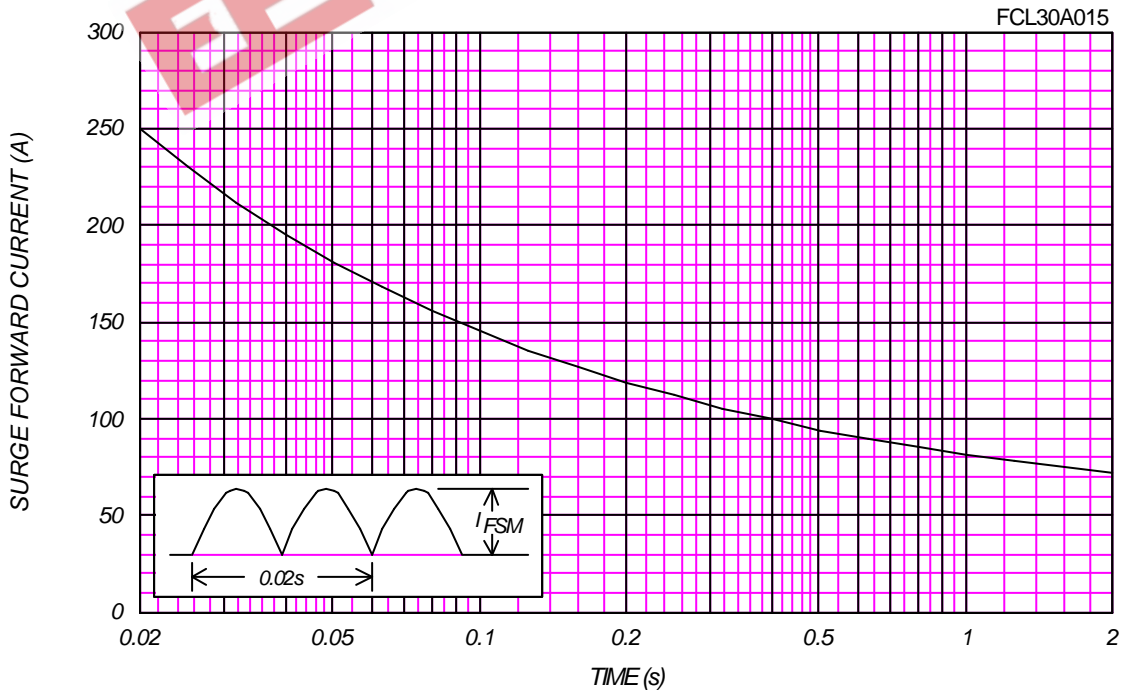
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=15V$



SURGE CURRENT RATINGS

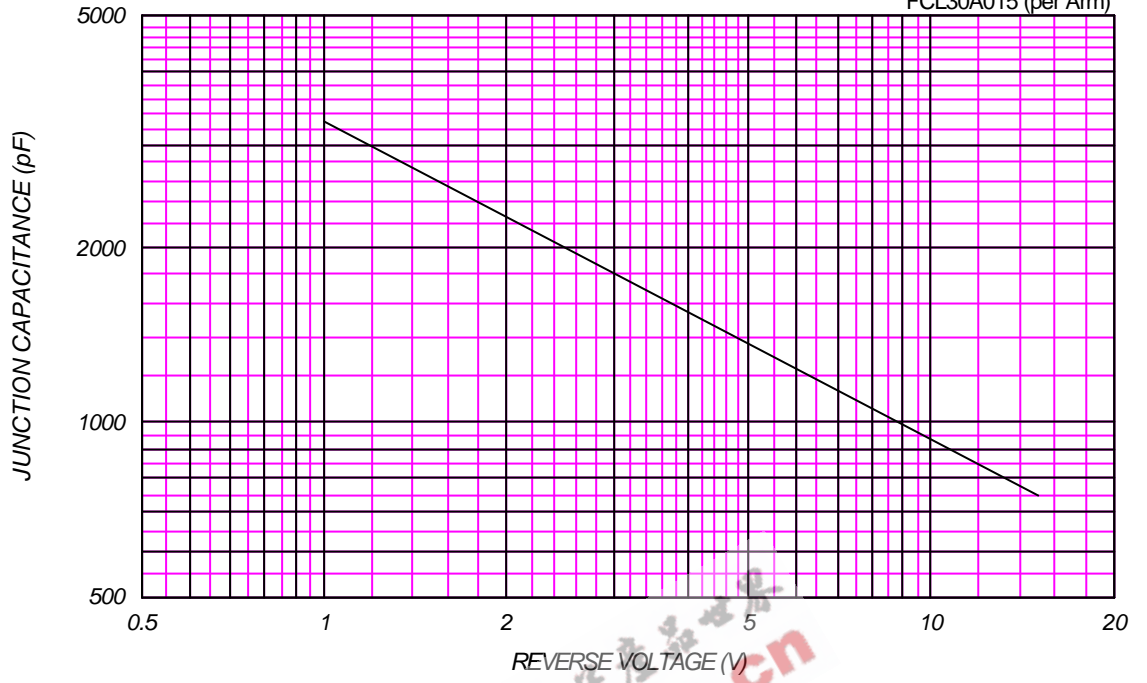
$f=50\text{Hz}$, Sine Wave, Non-Repetitive, No Load



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCL30A015 (per Arm)



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