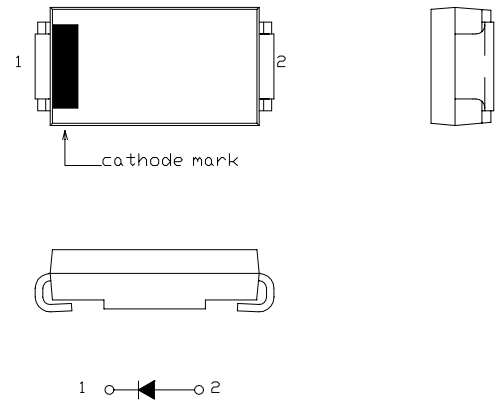


OUTLINE DRAWING

FRD Type : NSF03A20

FEATURES

- * **FLAT-PAK** Surface Mount Device
- * Ultra Fsat Recovery
- * High Surge Capability
- * Low Forward Voltage Drop
- * Low Power Loss, High Efficiency
- * Packaged in 16mm Tape and Reel
- * Not Rolling During Assembly



Maximum Ratings

Approx Net Weight:016g

Rating	Symbol	NSF03A20			Unit
Repetitive Peak Reverse Voltage	V _{RRM}	200			V
Average Rectified Output Current	I _O	1.61	Ta=25 °C *1	50Hz Half Sine	A
		3.0	T1=106 °C *2	Wave Resistive Load	
RMS Forward Current	I _{F(RMS)}	4.71			A
Surge Forward Current	I _{FSM}	45	50Hz Half Sine Wave,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			°C
Storage Temperature Range	T _{stg}	-40 to +150			°C

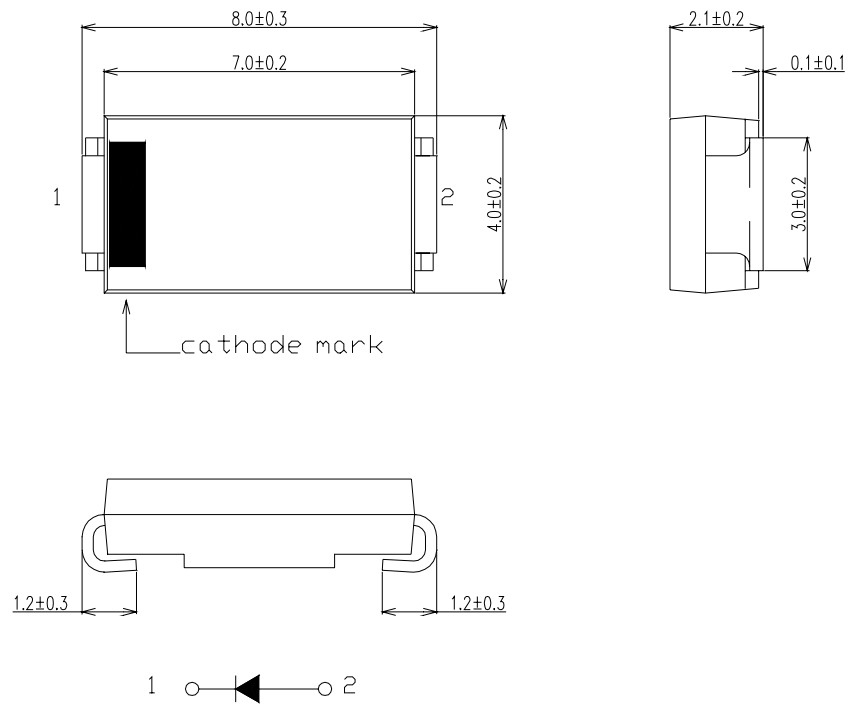
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^{\circ}\text{C}$, $V_{RM}= V_{RRM}$	-	-	10	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^{\circ}\text{C}$, $I_{FM}= 3.0\text{A}$	-	-	0.98	V
Reverse Recovery Time	t_{rr}	$T_a= 25^{\circ}\text{C}$, $I_{FM}=3.0\text{ A}$ $-di/dt=50\text{A}/\mu\text{s}$			30	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient *1	-	-	89	$^{\circ}\text{C} / \text{W}$
	$R_{th(j-l)}$	Junction to Lead	-	-	13	

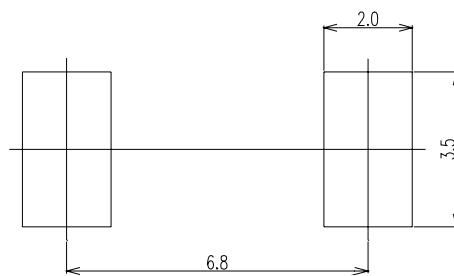
*1 Alumina Substrate Mounted (Soldering Lands=2x3.5mm,Both Sides)

*2 T_l = Lead Temperature

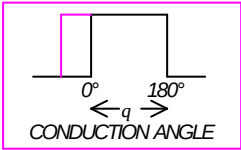
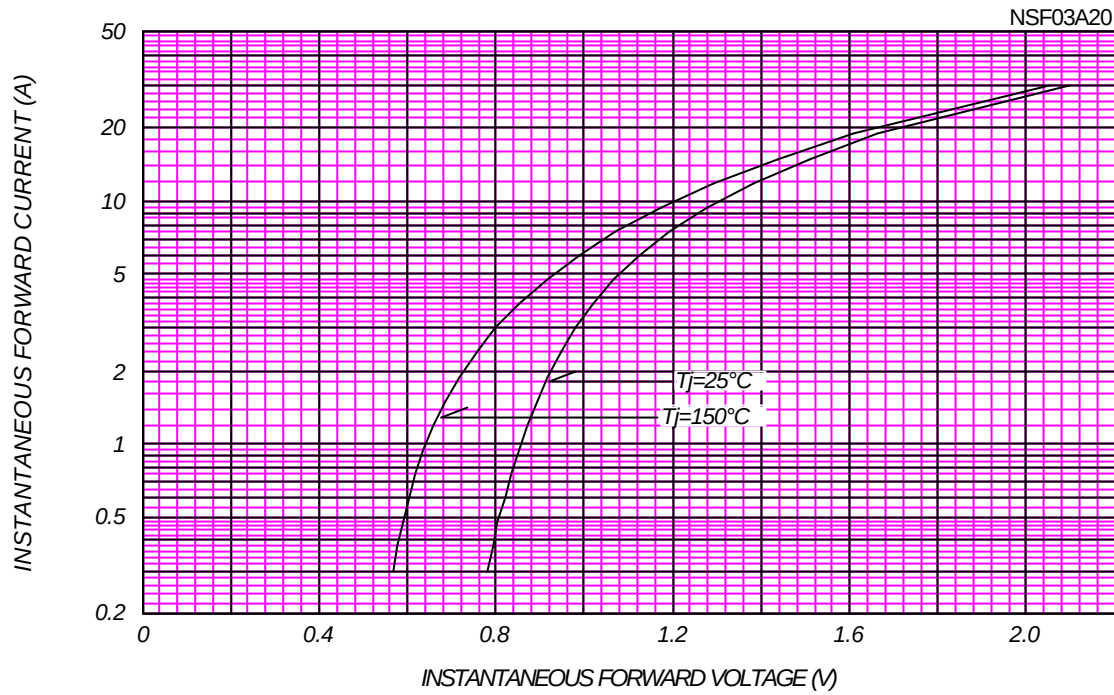
NSF03A20 OUTLINE DRAWING (Dimensions in mm)



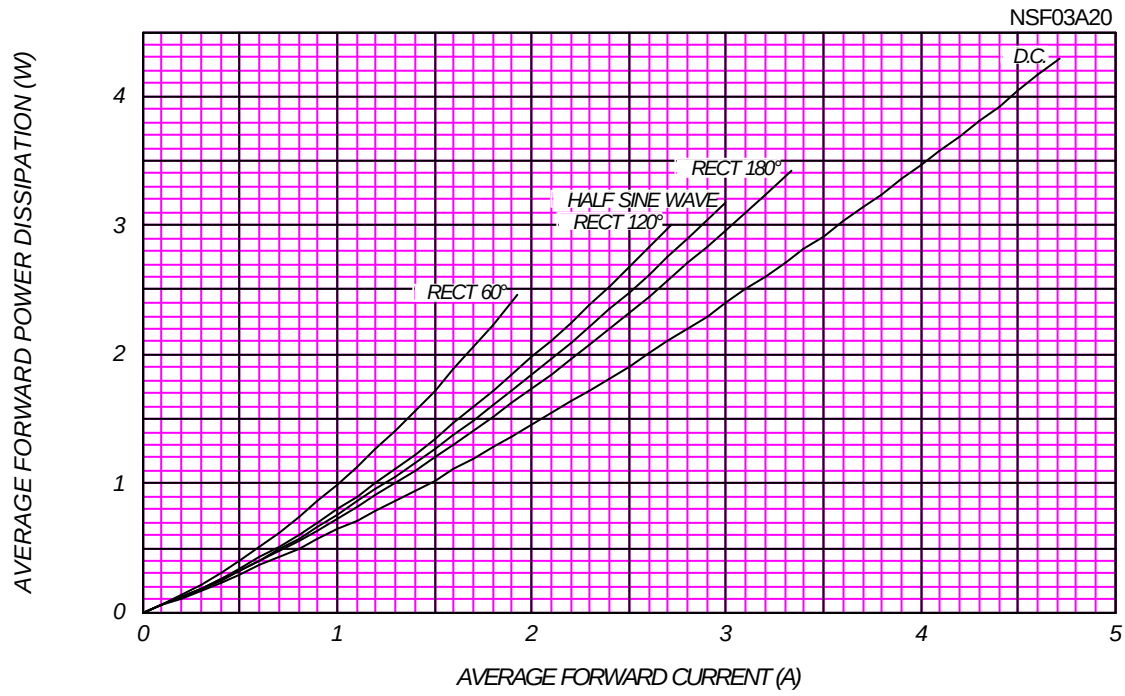
SOLDERING PAD

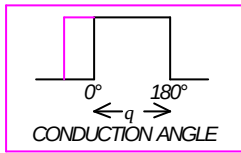


FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION

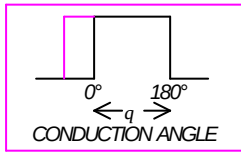
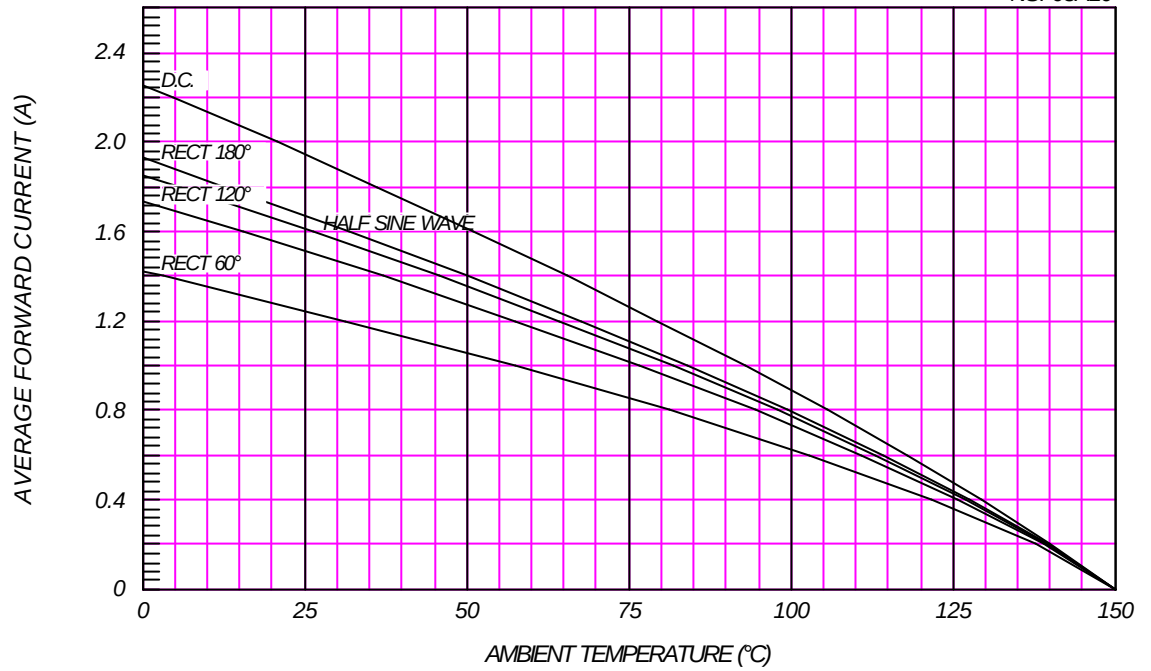




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

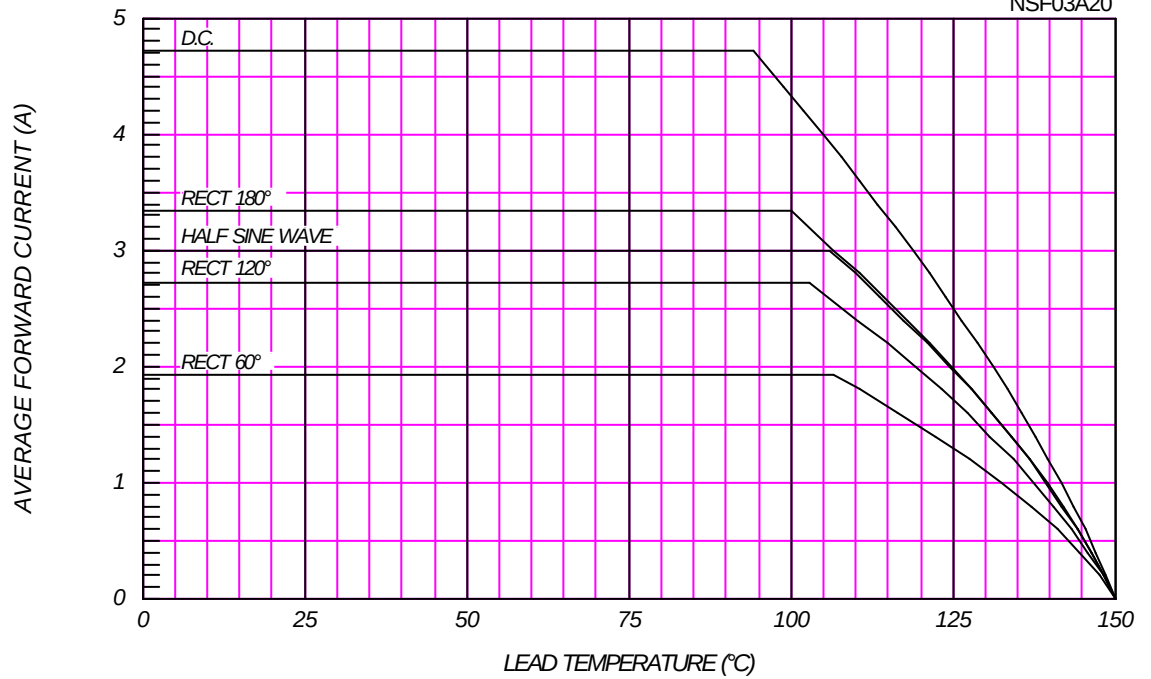
Alumina Substrate Mounted (Soldering Land=2×3.5mm)

NSF03A20



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

NSF03A20



SURGE CURRENT RATINGS

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

NSF03A20

