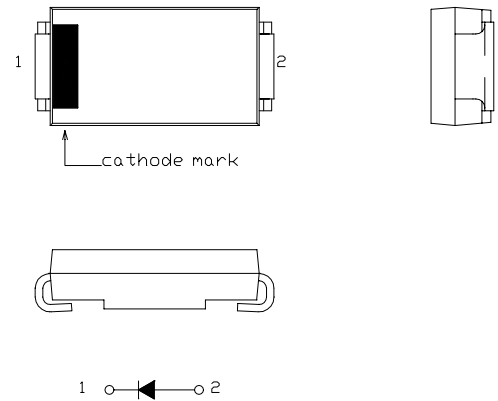


OUTLINE DRAWING

FRD Type : NSU03A60

FEATURES

- * **FLAT-PAK** Surface Mount Device
- * Ultra Fsat Recovery
- * Packaged in 16mm Tape and Reel
- * Not Rolling During Assembly
- * For Power Factor Improvement High Frequency Rectification



Maximum Ratings

Approx Net Weight:016g

Rating	Symbol	NSU03A60		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	600		V
Average Rectified Output Current	I_O	1.1	$T_a=25\text{ }^\circ\text{C}$ *1	50Hz Half Sine Wave Resistive Load
		3.0	$T_1=72\text{ }^\circ\text{C}$ *2	
RMS Forward Current	$I_{F(RMS)}$	4.71		A
Surge Forward Current	I_{FSM}	35	50Hz Half Sine Wave, 1cycle Non-repetitive	A
Operating Junction Temperature Range	T_{jw}	-40 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +150		$^\circ\text{C}$

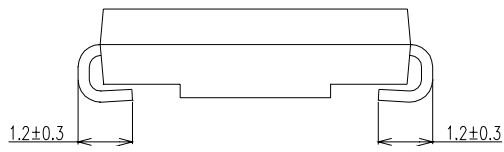
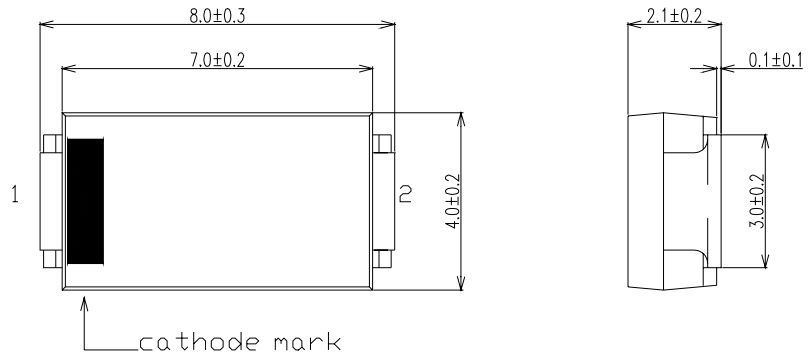
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ\text{C}$, $V_{RM}= V_{RRM}$	-	-	20	μA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ\text{C}$, $I_{FM}= 3.0\text{A}$	-	1.9	2.3	V
Reverse Recovery Time	trr	$T_a= 25^\circ\text{C}$, $I_{FM}=3\text{ A}$ $-di/dt=50\text{A}/\mu\text{s}$	-	21	32	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	

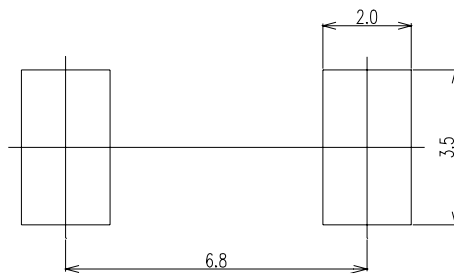
*1 Alumina Substrate Mounted (Soldering Lands=2x3.5mm,Both Sides)

*2 T_1 = Lead Temperature

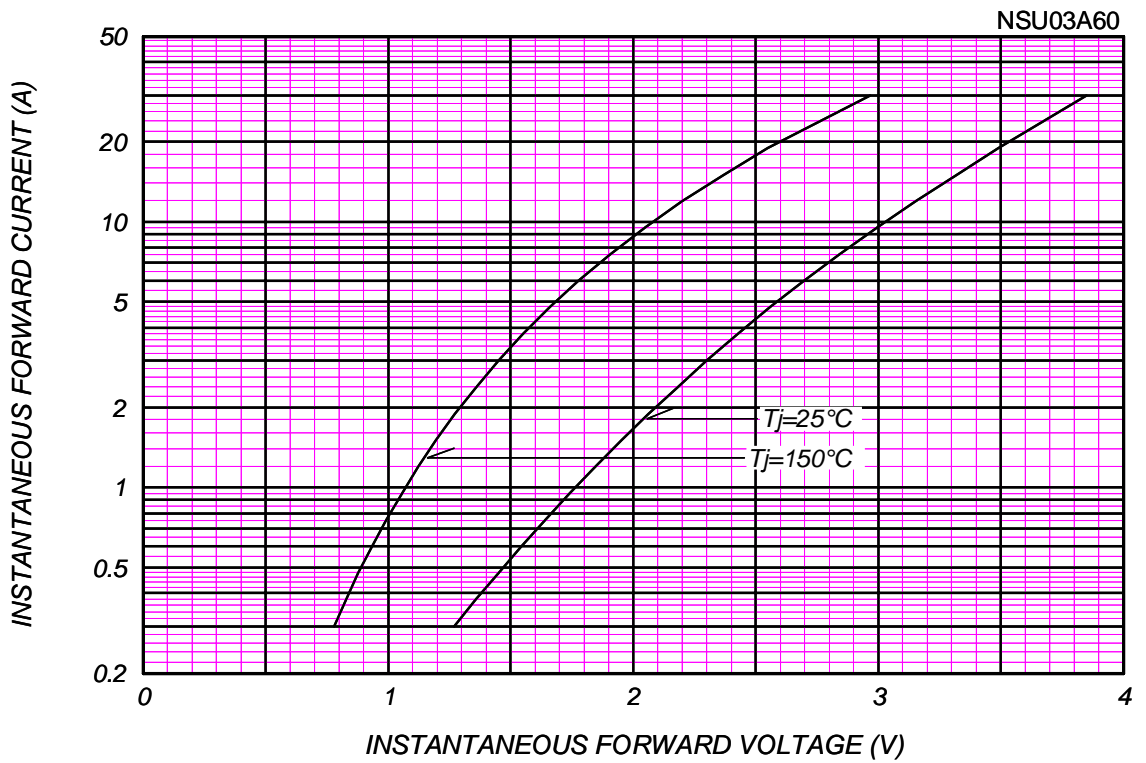
NSU03A60 OUTLINE DRAWING (Dimensions in mm)



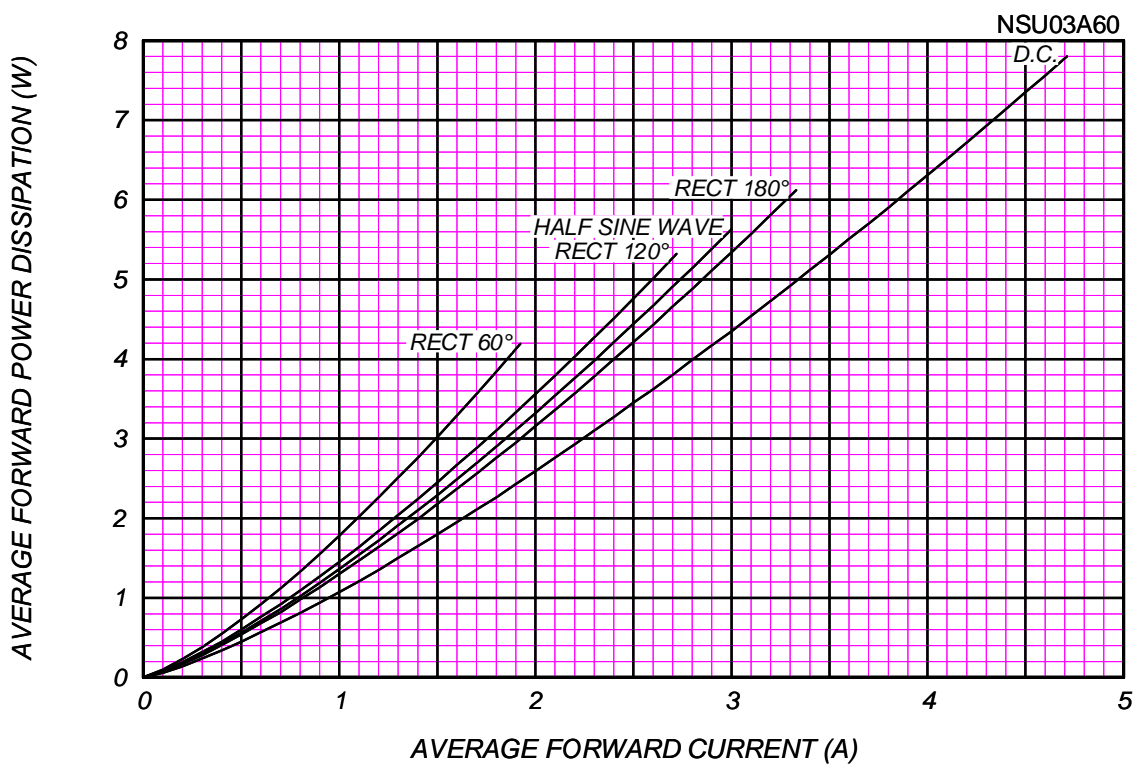
SOLDERING PAD

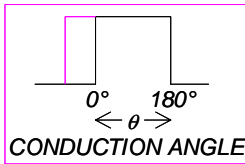


FORWARD CURRENT VS. VOLTAGE



AVERAGE FORWARD POWER DISSIPATION

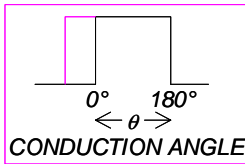
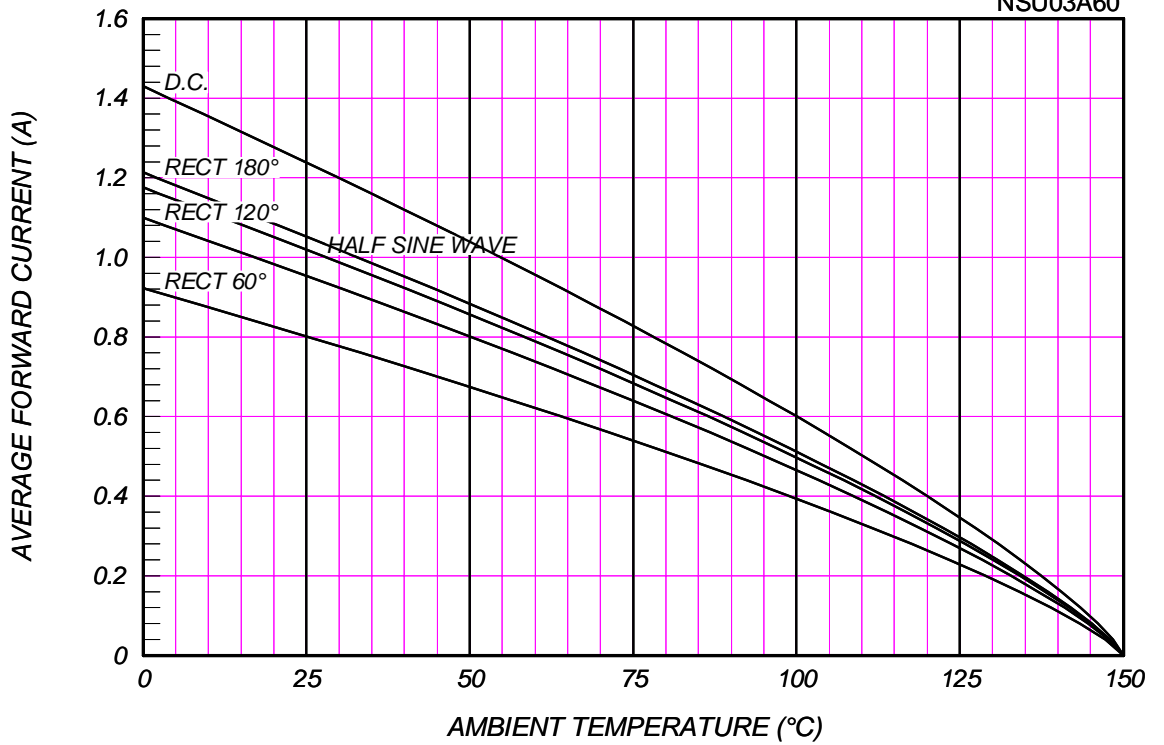




AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

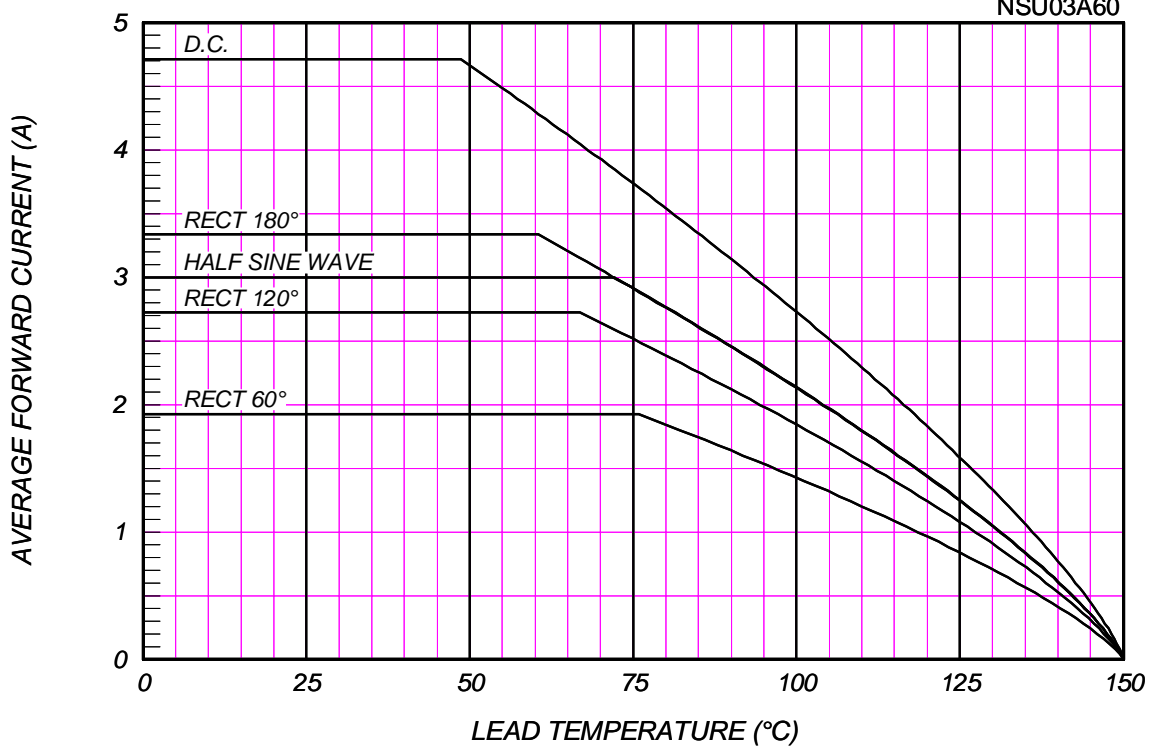
Alumina Substrate Mounted (Soldering Land=2x3.5mm)

NSU03A60



AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

NSU03A60



SURGE CURRENT RATINGS

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

NSU03A60

