

Characteristic		Symbol	Value	Unit	
Non-Repetitive Peak Reverse Voltage		V _{RM}	250	V	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	250	V		
RMS Reverse Voltage	V _{R(RMS)}	177	V		
Forward Continuous Current (Note 5)		I _{FM}	200	mA	
Non-Repetitive Peak Forward Surge Current	@ t = 50µs @ t = 100µs @ t = 10ms	I _{FSM}	10 8 2	А	

Thermal Characteristics

Characteristic	Symbol	Value	Unit	
Power Dissipation (Note 5)	PD	300	mW	
Thermal Resistance Junction to Ambient Air (Note 5)	R _{θJA}	417	°C/W	
Operating and Storage Temperature Range	TJ, T _{STG}	-65 to +150	°C	

Electrical Characteristics (@T_A = 25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	250	_	V	I _R = 100μA
Forward Voltage	VF		1.05 1.25	V	I _F = 100mA I _F = 200mA
Reverse Current (Note 6)	I _R	—	100 100	nA μA	V _R = 200V V _R = 200V, T _J = +150°C
Total Capacitance	CT	_	5	pF	V _R = 6, f = 1.0MHz
Reverse Recovery Time	t _{rr}	_	50	ns	$V_{R} = 6V, I_{F} = 5mA$

Notes: 5. Part mounted on FR-4 board with recommended pad layout 6. Short duration pulse test used to minimize self-heating effect. 2020-11/43 REV:B



RATING AND CHARACTERISTICS CURVES (BAS21TW)



Package Outline Dimensions



SOT363								
Dim	Dim Min Max							
Α	0.10	0.30						
В	1.15	1.35						
С	2.00	2.20						
D	0.65 Typ							
F	0.45							
Н	1.80 2							
J	0 0.10							
Κ	0.90 1.00							
L	0.25 0.40							
М	I 0.10 (
α	8°							
All Dimensions in mm								

Suggested Pad Layout



Dimensions	Value (in mm)
Z	2.5
G	1.3
Х	0.42
Y	0.6
C1	1.9
C2	0.65

Marking Information

•	XJK	ΜY

XJK = Product Type Marking Code YM = Date Code Marking Y =Year (ex: T = 2011) M = Month (ex: 9 = September)

	Date Code Key												
	Year	2	011	2012	20	13	2014	201	5	2016	2017	,	2018
	Code		Y	Z	ŀ	4	В	C		D	E		F
Γ	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Code	1	2	3	4	5	6	7	8	9	0	N	D

Ordering Information

Part Number	Case	Packaging
BAS21TW	SOT363	3000/Tape & Reel



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