BAS21TW-Q1

200mA Surface Mount Switching Diode Array - 250V

Features

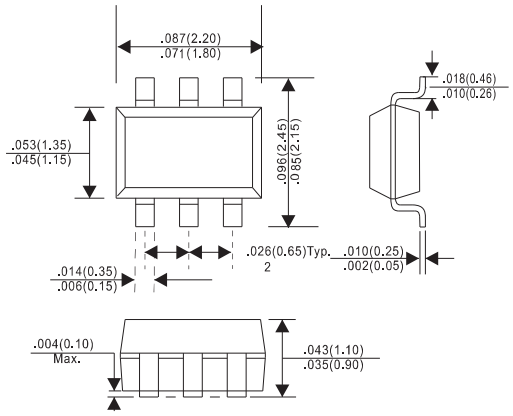
- Surface mount package ideally suited for automatic insertion
- Fast switching
- Low leakage current
- Reverse voltage: 250V
- Low junction capacitance
- Average forward current: 200mA
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-363
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

Package outline

SOT-363



Dimensions in inches and (millimeters)

Maximum ratings (AT T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		250
Reverse voltage	V_R	V		250
Average forward current	I_{FAV}	mA		200
Non-repetetive peak forward surge current	I_{FSM}	A	8.3ms half-sine wave	1.7
Power dissipation	P_D	mW		200
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	℃/W		625
Maximum junction temperature	T_j	℃		-55 ~+150
Storage temperature range	T_{stg}	℃		-55 ~+150

Electrical characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V_R	V	I_R=100uA	250	
Forward Voltage	V_F	V	I_F=100mA		1.05
			I_F=200mA		1.25
Reverse Leakage Current	I_R	nA	V_R=200V		100
Capacitance	Cj	pF	V_R=0V,f=1MHz		5
Reverse Recovery Time	T_{RR}	ns	I_F=I_R=30mA，Irr=1mA		50

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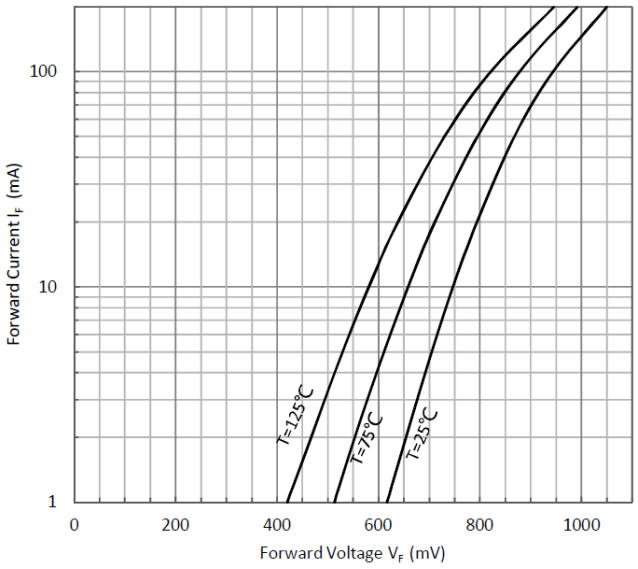
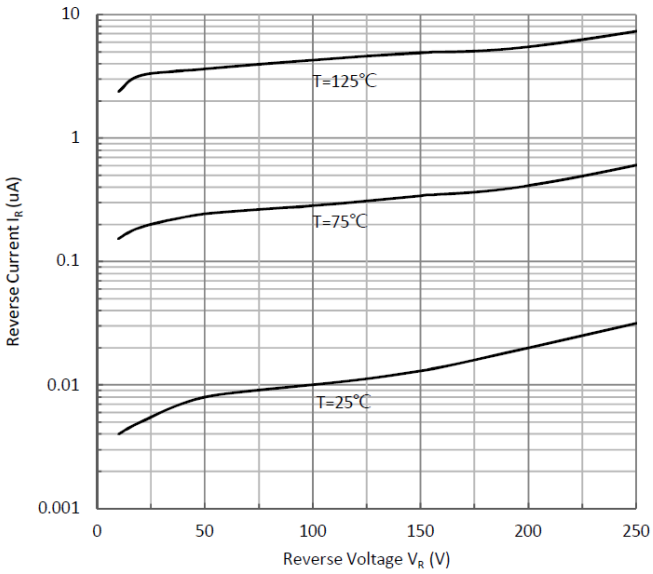
Rating and characteristics curves

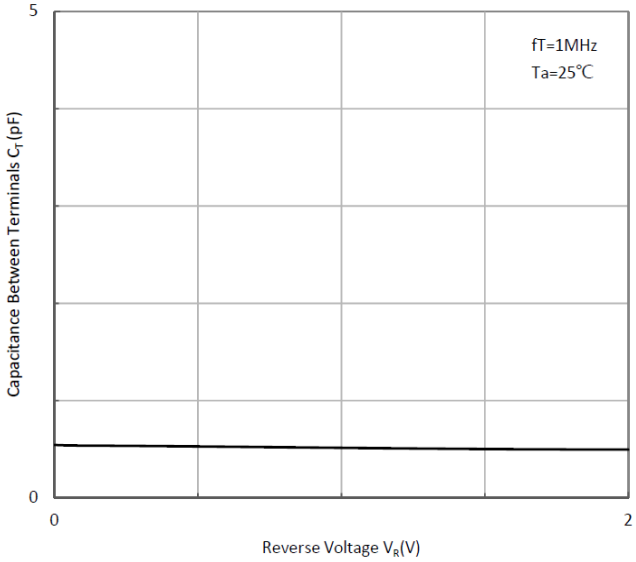
Forward Characteristics



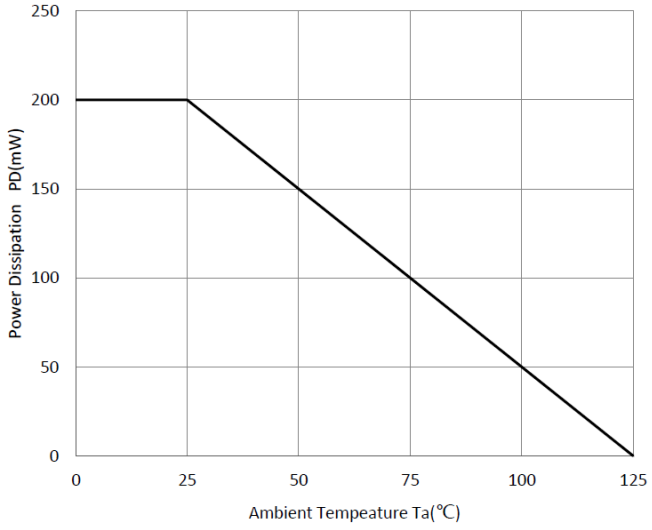
Reverse Characteristics



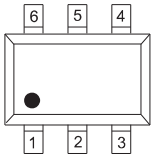
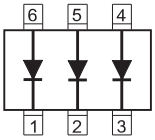
Capacitance Characteristics



Power Derating Curve



Pinning information

Type number	Marking code	Simplified outline	Symbol
BAS21TW-Q1	XJK		

Suggested solder pad layout

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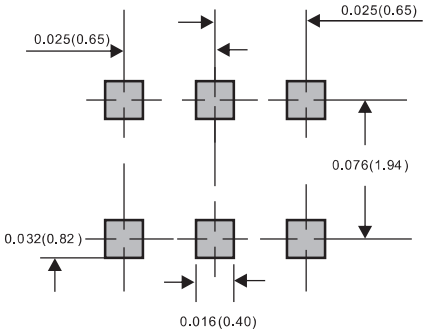

Dimensions in inches and (millimeters)