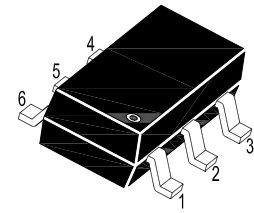
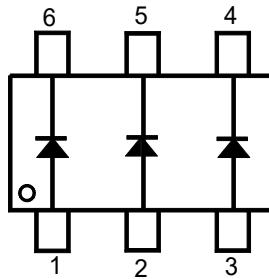


BAS21SRD

High Voltage Switching Diodes



1. Anode 2. Anode 3. Anode
4. Cathode 5. Cathode 6. Cathode
SOT-26 Plastic package

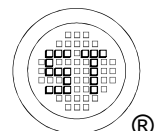
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	250	V
Continuous Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5 2.5	A
		at $t = 1\text{ s}$ at $t = 1\text{ }\mu\text{s}$	
Total Device Dissipation	P_{tot}	350	mW
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

Thermal Resistance Ratings

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	357	$^\circ\text{C/W}$

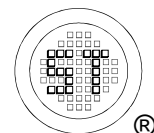
¹⁾ Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.



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Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)}$	250	-	V
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	1 1.25	V V
Reverse Current at $V_R = 200\text{ V}$ at $V_R = 200\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$	I_R	- -	100 100	nA μA
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_{tot}	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $I_{R(REC)} = 3\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns



Electrical Characteristic Curve

Fig 1. Power Derating Curve

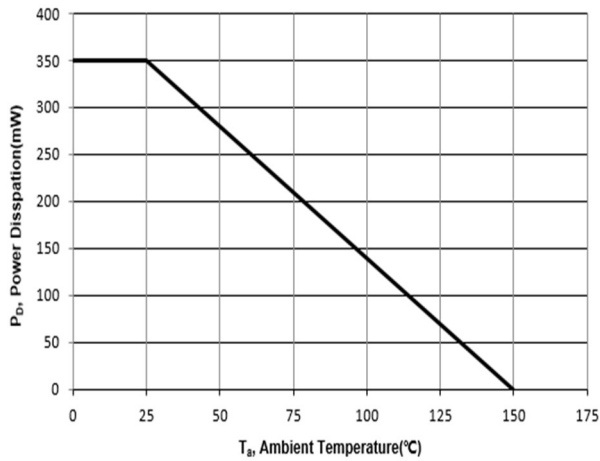


Fig 2. Forward Characteristic Curve

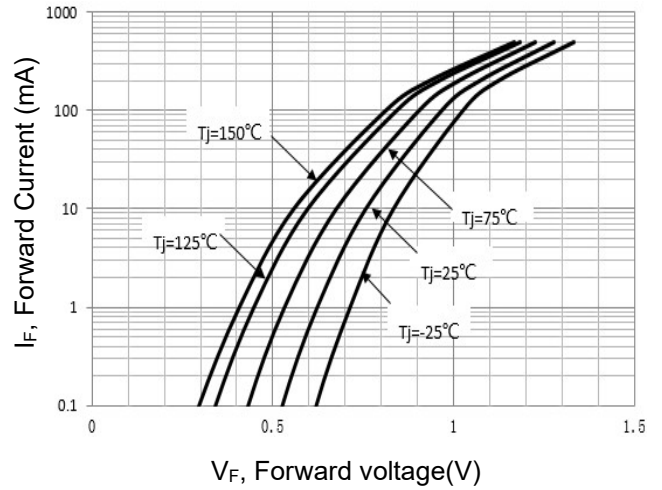


Fig 3. Total Capacitance Curve

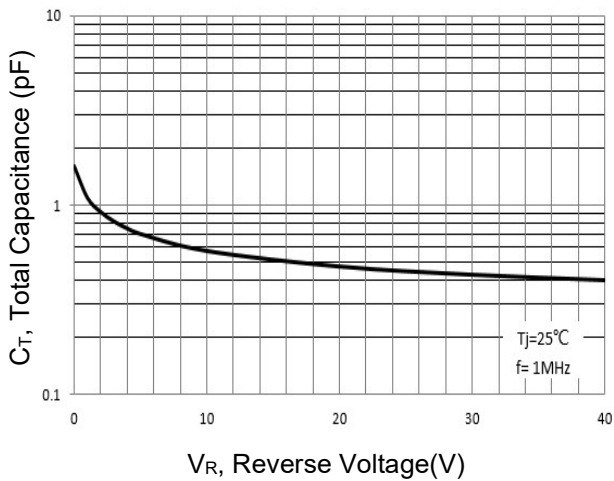
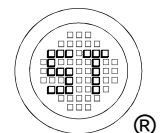
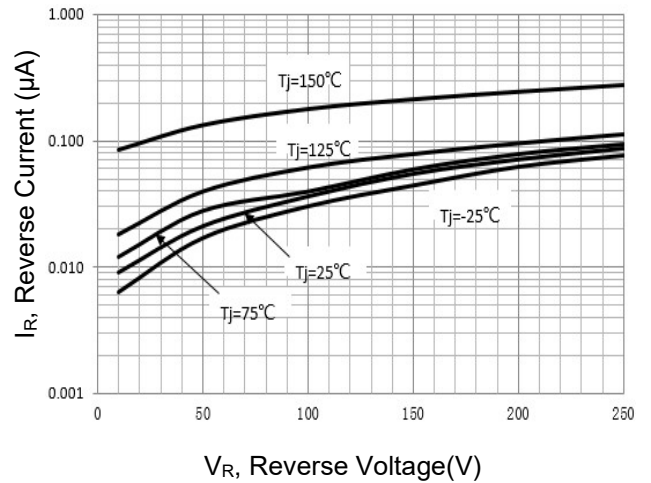


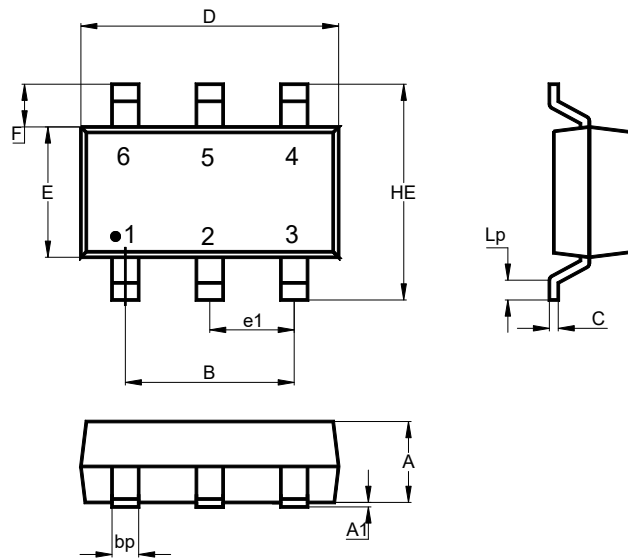
Fig 4. Reverse Characteristic Curve



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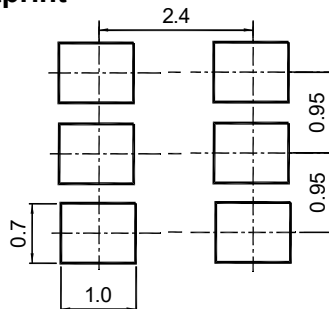
Package Outline (Dimensions in mm)

SOT-26



Unit	A	A1	B	C	D	E	e1	F	HE	Lp	bp
mm	1.2	0.1	2.1	0.20	3.1	1.7	0.95	0.65	3.0	0.6	0.5
	1.0	0	1.7	0.08	2.7	1.3	typ.	0.6	2.6	0.2	0.3

Recommended Soldering Footprint

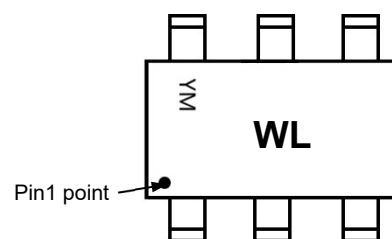


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-26	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

"WL" = Part No.
 "YM" = Date Code Marking
 "Y" = Year
 "M" = Month
 Font type: Arial



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