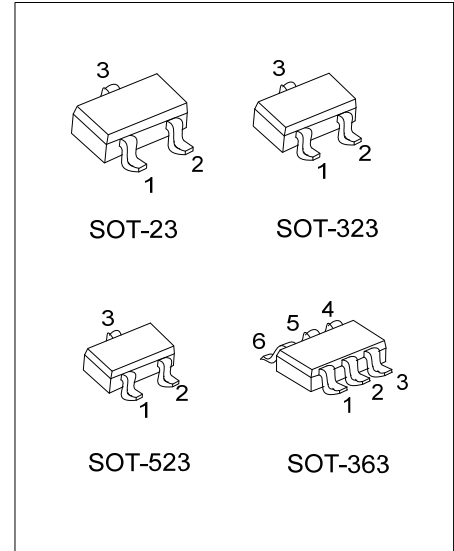
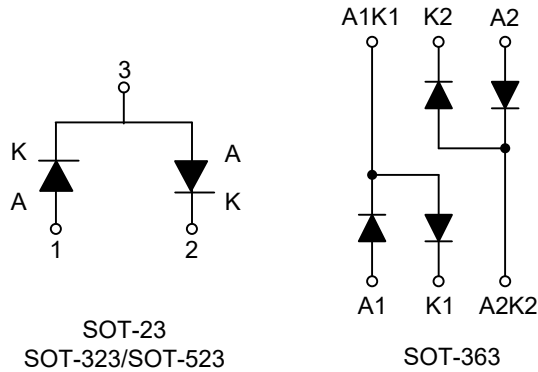


BAV99

DIODE

HIGH CONDUCTANCE ULTRA FAST DIODE

EQUIVALENT



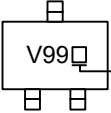
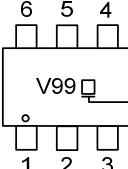
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
BAV99L-AE3-R	BAV99G-AE3-R	SOT-23	A1	K2	K1A2	-	-	-	Tape Reel
BAV99L-AL3-R	BAV99G-AL3-R	SOT-323	A1	K2	K1A2	-	-	-	Tape Reel
BAV99L-AN3-R	BAV99G-AN3-R	SOT-523	A1	K2	K1A2	-	-	-	Tape Reel
BAV99L-AL6-R	BAV99G-AL6-R	SOT-363	A1	K1	A2K2	A2	K2	A1K1	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

BAV99G-AE3-R (1) Packing Type (2) Package Type (3) Green Package	(1) R: Tape Reel (2) AE3: SOT-23, AL3: SOT-523, AN3: SOT-523, AL6: SOT-363 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

SOT-23 / SOT-323 / SOT-523	SOT-363
 L: Lead Free G: Halogen Free	 L: Lead Free G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS (T_A = 25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Working Inverse Voltage		W _{IV}	100	V
Average Rectified Current		I _{F(AV)}	200	mA
DC Forward Current (Note 3)	SOT-23	I _{FM}	600	mA
	SOT-323		150	mA
	SOT-523/SOT-363		75	mA
Recurrent Peak Forward Current		I _{FRM}	700	mA
Non-repetitive Peak Forward Surge Current	Pulse width = 1.0 second	I _{FSM}	1.0	A
	Pulse width = 1.0 microsecond		2.0	A
Power Dissipation	SOT-23	P _D	350	mW
	SOT-323/SOT-363		200	mW
	SOT-523		150	mW
Junction Temperature		T _J	+150	°C
Storage Temperature		T _{STG}	-65 ~ +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

3. Device mounted on FR-4 substrate PC board, 2oz copper, with 1inch square copper plate.

■ THERMAL DATA

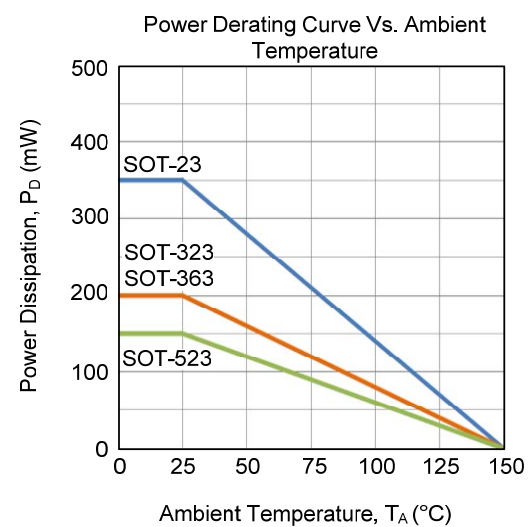
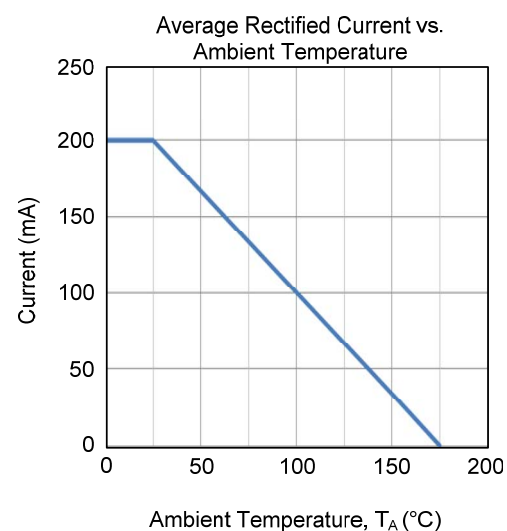
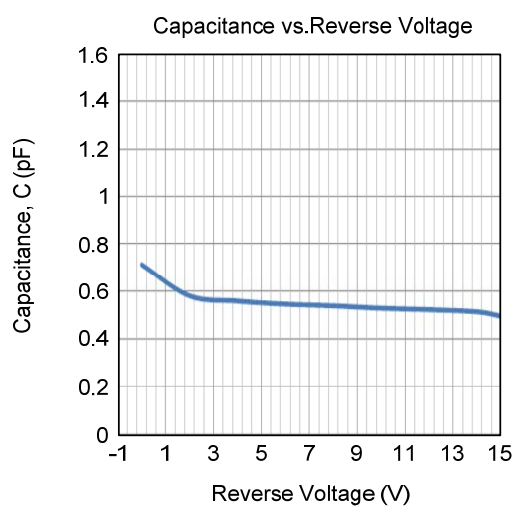
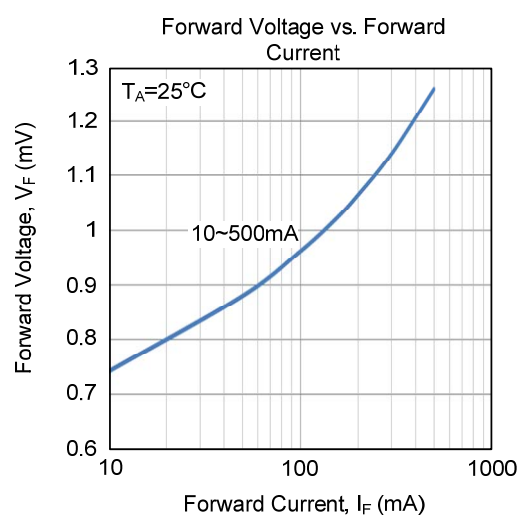
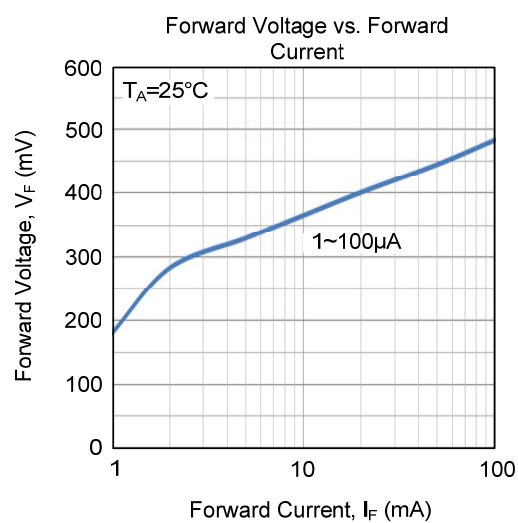
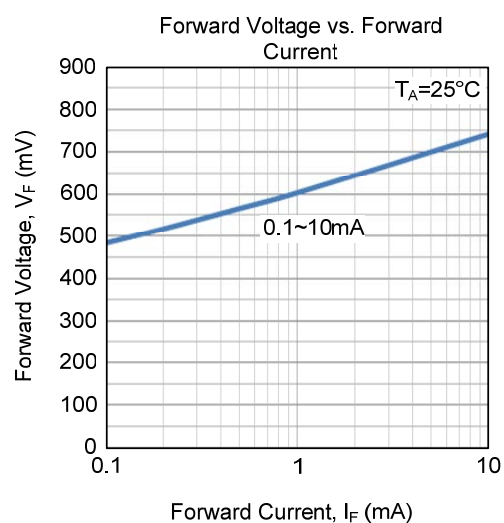
PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	SOT-23	θ _{JA}	357	°C /W
	SOT-323/SOT-363		625	°C /W
	SOT-523		833	°C /W

Note: Device mounted on FR-4 substrate PC board, 2oz copper, with 1inch square copper plate.

■ ELECTRICAL CHARACTERISTICS (T_A = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	V _R	I _R =100μA	100			V
Maximum Instantaneous Forward Voltage	V _{FM}	I _F =1.0mA			715	mV
		I _F =10mA			855	mV
		I _F =50mA			1.0	V
		I _F =150mA			1.25	V
Peak Forward Voltage	V _{SM}	I _F =10mA, t _R =20nS			1.75	V
Maximum Instantaneous Reverse Current	I _{RM}	V _R =85V			2.5	μA
		V _R =25V, T _A =150°C			30	
		V _R =85V, T _A =150°C			50	
Diode Capacitance	C _O	V _R =0, f=1.0MHz			1.5	pF
Reverse Recovery Time	t _{RR}	I _F =I _R =10mA, I _{RR} =1.0mA R _L =100Ω			4.0	ns

TYPICAL CHARACTERISTICS



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