

DATA SHEET

BAW56W/BAV70W/BAV99W

SURFACE MOUNT SWITCHING DIODES

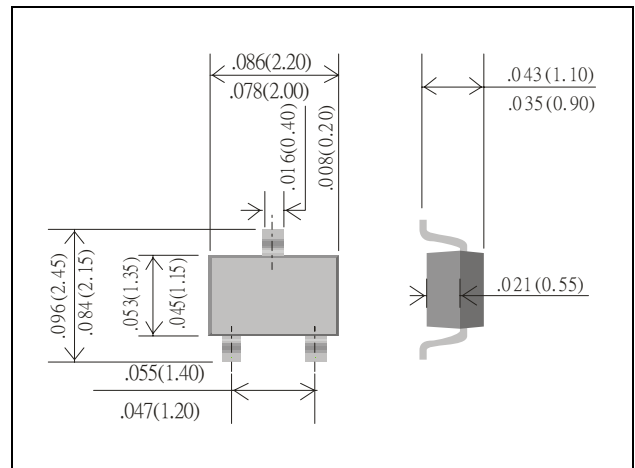
VOLTAGE 75 Volts **POWER** 200 mW

FEATURES

- FAST SWITCHING SPEED
- SURFACE MOUNT PACKAGE IDEALLY SUITED FOR AUTOMATIC INSERTION
- ELECTRICALLY IDENTICAL TO STANDERD JEDEC
- HIGH CONDUCTANCE

MECHANICAL DATA

- CASE : SOT-323 PLASTIC
- TERMINALS : SOLDERABLE PER MIL-STD-202 METHOD 208
- APPROX.WEIGHT:0.0052 GRAMS



CASE : SOT-323

DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

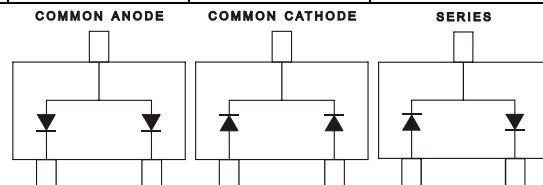
RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

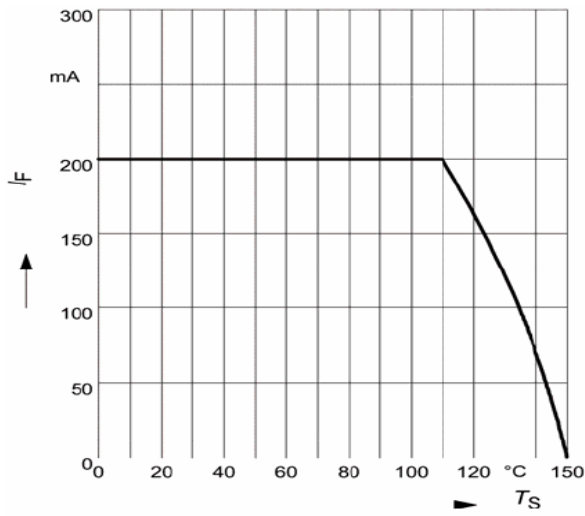
PARAMETER	SYMBOL	BAW56W	BAV70W	BAV99W	UNITS
MAXIMUM REVERSE VOLTAGE	V_R		75		V
PEAK FORWARD CURRENT	I_F		150		mA
POWER DISSIPATION DERATE ABOVE 25°C	P_{TOT}		200		mW
JUNCTION TEMPERATURE	T_j		150		°C
STORAGE TEMPERATURE	T_{STG}		-65~ +150		°C

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

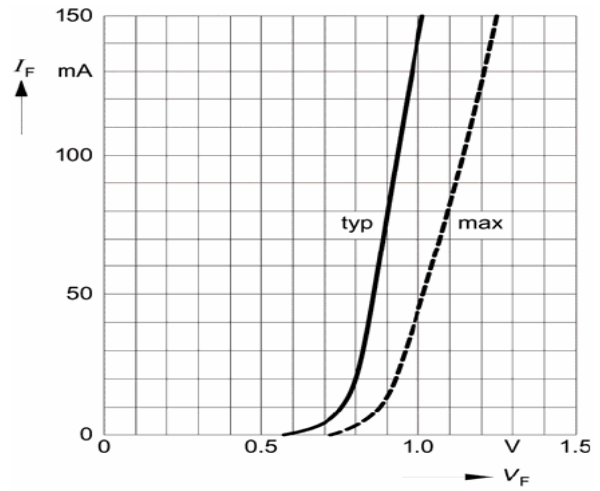
PARAMETER	SYMBOL	BAW56W	BAV70W	BAV99W	UNITS
MAXIMUM FORWARD VOLTAGE	V_F		$I_F=1\text{mA}$	0.715	V
			$I_F=10\text{mA}$	0.855	
			$I_F=50\text{mA}$	1.0	
			$I_F=150\text{mA}$	1.25	
MAXIMUM DC REVERSE CURRENT	I_R		$V_R=25\text{V}$	0.025	μA
			$V_R=75\text{V}$	2.5	
DIODE CAPACITANCE (NOTE 1)	C_D		1.5		pF
REVERSE RECOVERY TIME (NOTE 2)	T_{RR}		4.0		ns
CIRCUIT FIGURE		COMMON ANODE	COMMON CATHODE	SERIES	

NOTE: 1. C_D AT $V_R=0$, $f=1\text{MHz}$
 2. FROM $I_F=10\text{mA}$ TO $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$



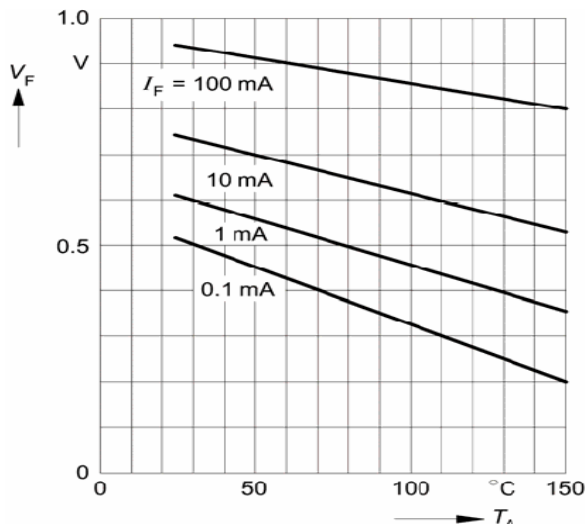
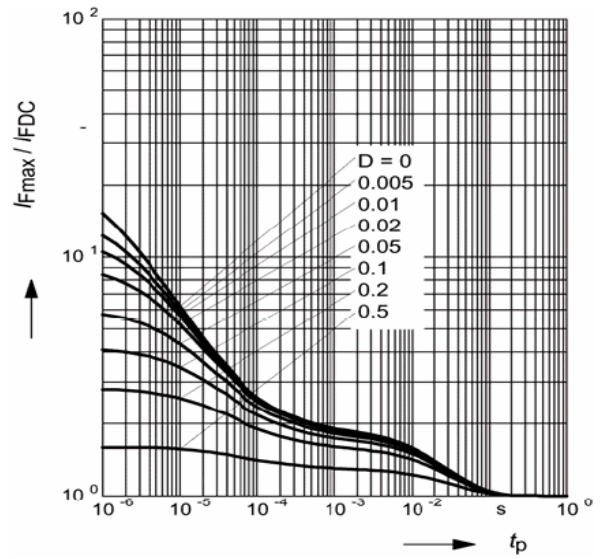
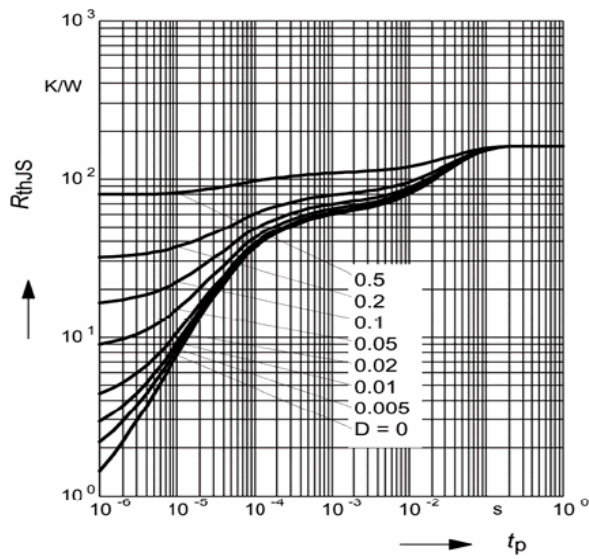


Permissible Pulse Load $R_{thJS} = f(t_p)$

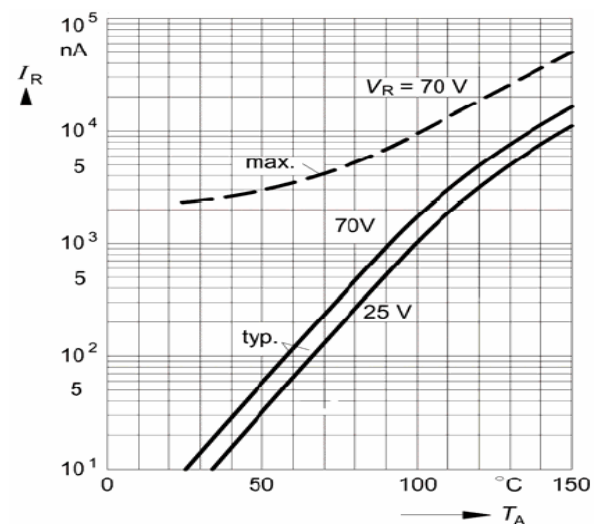


Permissible Pulse Load

$I_{Fmax} / I_{FDC} = f(t_p)$



Forward voltage $V_F = f(T_A)$



Reverse current $I_R = f(T_A)$