

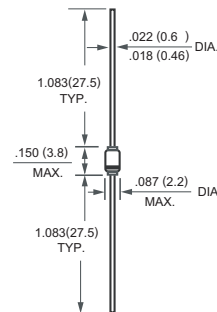
**SMALL SIGNAL SWITCHING DIODE**

**FEATURES**

- \* Silicon epitaxial planar diode
- \* DO-35 Package, glass case
- \* High speed switching diode
- \* 500 mW power dissipation
- \* Polarity: Color band denotes cathode



DO-35



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.

**MAXIMUM RATINGS**

		BAV17	BAV18	BAV19	BAV20	BAV21	UNITS
Reverse voltage	$V_R$	20	50	100	150	200	V
Peak reverse voltage	$V_{RM}$	25	60	120	200	250	V
Average forward rectified current Half wave rectification with resist.load @ $T_A=25^\circ\text{C}$ and $f \geq 50\text{Hz}$	$I_{(AV)}$	250 <sup>1)</sup>					mA
Forward surge current @ $t < 1\text{s}$ and $T_J=25^\circ\text{C}$	$I_{FSM}$	1.0					A
Power dissipation @ $T_A=25^\circ\text{C}$	$P_{tot}$	500 <sup>1)</sup>					mW
Thermal resistance junction to ambient	$R_{\theta JA}$	350					K/W
Junction temperature	$T_J$	175					°C
Storage temperature range	$T_{STG}$	-55 --- +175					°C

1)Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

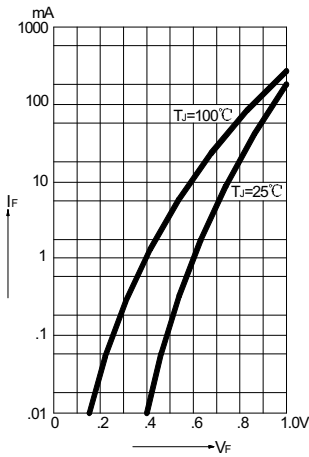
**ELECTRICAL CHARACTERISTICS**

		MIN	TYP	MAX	UNITS
Forward voltage @ $I_F=100\text{mA}$	$V_F$	-	-	1.0	V
Leakage current @ $T_J=25^\circ\text{C}$ at reverse voltage @ $T_J=100^\circ\text{C}$	$I_R$	-	-	100 15	nA μA
Capacitance @ $V_F=V_R=0\text{V}$ $f=1\text{MHz}$	$C_J$	-	1.5	-	pF
Reverse recovery time from $I_F=30\text{mA}$ to $I_R=30\text{mA}$ from $I_{RR}=3\text{mA}$ , $R_L=100\Omega$ .	$t_{rr}$	-	-	50	ns

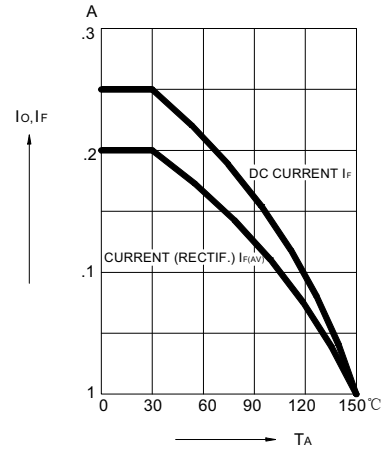
1)Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

# RATING AND CHARACTERISTICS CURVES (BAV17 THRU BAV21)

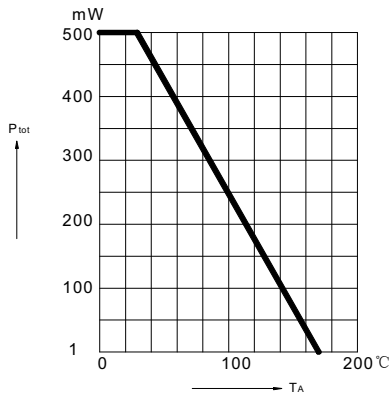
**FIG.1 – FORWARD CHARACTERISTICS**



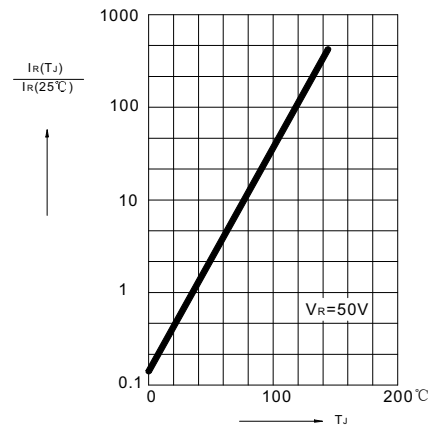
**FIG.2 – ADMISSIBLE FORWARD CURRENT VERSUS AMBIENT TEMPERATURE**



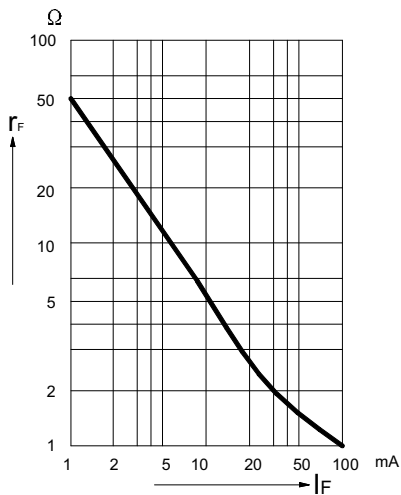
**FIG.3 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE**



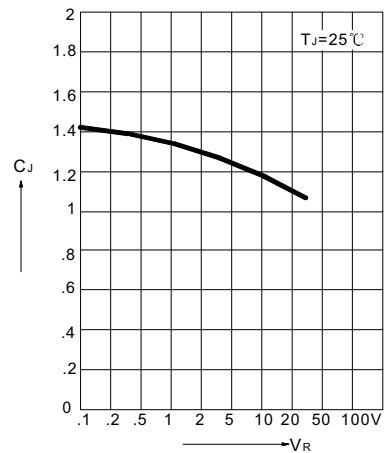
**FIG.4 – LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE**



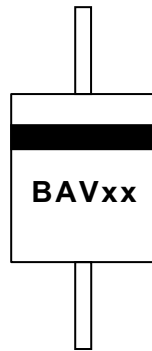
**FIG.5 – DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT**



**FIG.6 – CAPACITANCE VERSUS REVERSE VOLTAGE**



## MARKING INFORMATION



Cathode	= Polarity Band
BAVxx	= Device Number
xx	= 17~ 21

# PACKAGING OF DIODE

## BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-35	-B	10,000	240*100*100	410*350*275	120,000	21.5

## REEL PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-35	-T	10,000	5.0	52	356	380*380*420	50,000	11.00

## AMMO PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON ( EA )	GROSS WEIGHT (Kg)
DO-35	-F	5,000	5.0	52	250*80*80	410*260*340	100,000	20.00

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