

SMALL SIGNAL SWITCHING DIODE

FEATURES

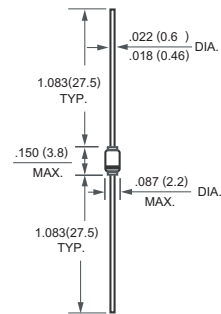
- * Silicon epitaxial planar diode
- * DO-35 Package, glass case
- * High speed switching diode
- * 500 mW power dissipation
- * Polarity: Color band denotes cathode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



DO-35



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 ¹⁾					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 ¹⁾					mW
Thermal resistance junction to ambient	$R_{\theta JA}$	350					K/W
Junction temperature	T_J	175					$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 --- +175					$^\circ\text{C}$

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 @ $T_J = 25^\circ\text{C}$	I_R	-	-	100	nA
at reverse voltage @ $T_J = 100^\circ\text{C}$		-	-	15	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

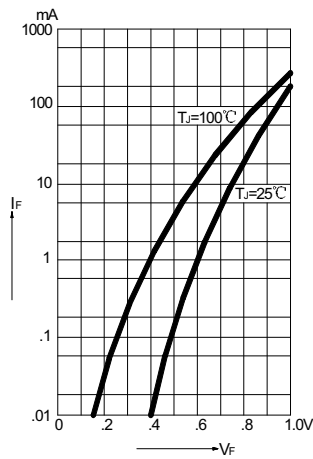


FIG.2 – ADMISSIBLE FORWARD CURRENT VERSUS AMBIENT TEMPERATURE

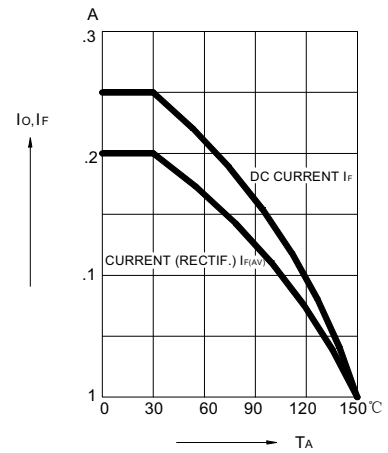


FIG.3 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

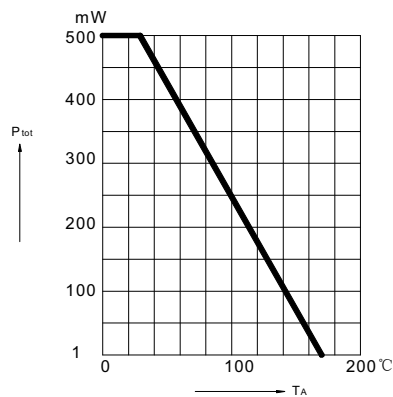


FIG.4 – LEAKAGE CURRENT VERSUS JUNCTION TEMPERATURE

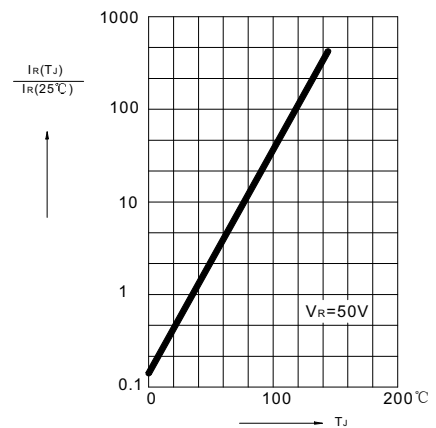


FIG.5 – DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

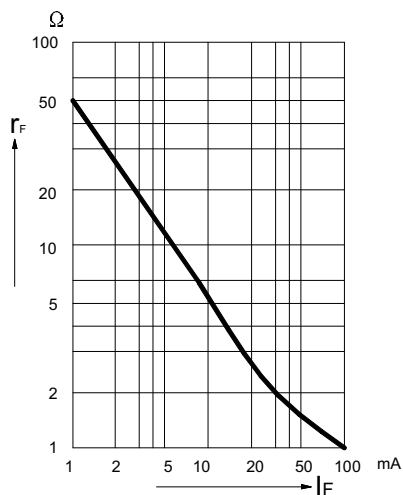
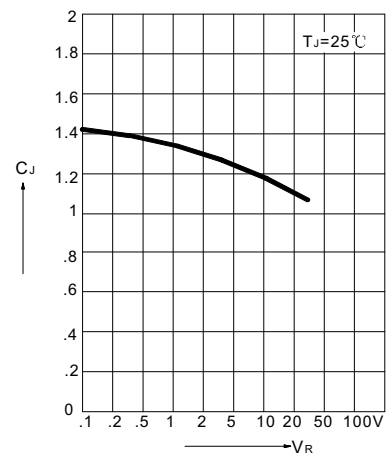
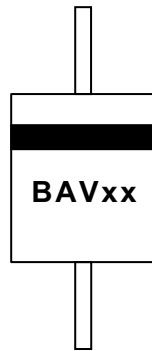


FIG.6 – CAPACITANCE VERSUS REVERSE VOLTAGE



MARKING INFORMATION



Cathode
BAVxx
xx

= Polarity Band
= Device Number
= 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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