

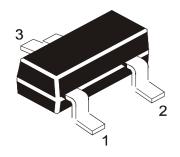
Continental Device India Limited

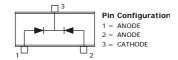
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company





SILICON PLANAR DUAL SWITCHING DIODES





BAV70

SOT-23 Formed SMD Package

For Lead Free Parts, Device Part # will be Prefixed with "T"

Marking BAV70 = A4

High-Speed Switching Dual Diodes, Common Cathode

ABSOLUTE MAXIMUM RATINGS (Rating Per Diode)

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	70	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Forward Current (DC)	I _F	215	mA
Repetitive Peak Forward Current	I _{FRM}	450	mA
Non Repetitive Peak Forward Current	:		
(per crystal)			
t=1 m6	I _{FSM}	4.0	A
t=1 ms	I _{FSM}	1.0	Α
t=1 s	I _{FSM}	0.5	Α
Power Dissipation up to T _a =25°C	P _D	250	mW
Storage Temperature Range	T _{stg}	- 55 to +150	°C
Junction Temperature	T _j	150	°C

THERMAL RESISTANCE

Junction to Ambient in free air	R _{th (j-a)}	500	K/W

ELECTRICAL CHARACTERISTICS (T_a=25° C unless specified otherwise) per diode

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_{F}	I _F = 1mA		0.715	V
		I _F = 10mA		0.855	V
		I _F = 50mA		1.0	V
		$I_{F} = 150 \text{mA}$		1.25	V
Reverse Current	I_R	$V_R = 25V, T_J = 150^{\circ}C$		60	μΑ
		V _R =70V		2.5	μΑ
		V _R =70V, T _J =150°C		100	μΑ μΑ
Diode Capacitance	C_d	$V_R=0V$, $f=1MHz$		1.5	pF
Forward Recovery Voltage	V_{fr}	I _F =10mA, t _r =20ns		1.75	V
D	t _{rr}	I_F =10mA, to I_R =60mA,		4.0	
Reverse Recovery Time		$I_R=1.0$ mA, $R_L=100\Omega$		4.0	ns
		$I_F=10$ mA to $V_R=5$ V,		45	
Reverse Charge When Switched Time	Q _S	$R_L=100\Omega$		45	pC

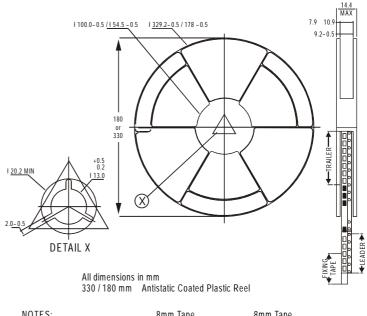
BAV70REV_1 071105E

SOT-23 Formed SMD Package

2.50 +/- 0.10 +/- 0.05 0.62 1.30+/-0.025 +/-0.05 0.62 +/-0.025 1.90 cL 3 - 0.05 - 1.30 +/- 0.05 0.62 I← 0.62 0.08 0.08 MIN MIN PARTING LINE RO.08 0.21

2.50 +/-0.10

SOT-23 Package Reel Information Reel specifications for Packing (13"/7" reels)



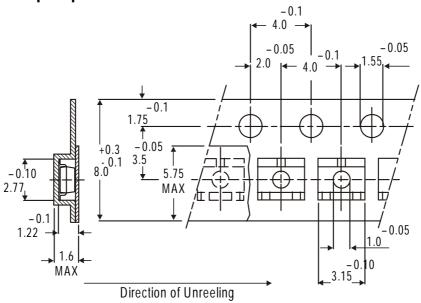
 NOTES:
 8mm Tape
 8mm Tape

 Size of Reel
 330 mm (13")
 180 mm (7")

 No. of Devices
 10,000 Pcs
 3,000 Pcs

- 1. The bandolier of 330 mm reel contains at least 10,000 devices.
- 2. The bandolier of 180 mm reel contains at least 3,000 devices.
- No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel.
 15 empty compartments for 180 mm reel.
- Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
- The carrier tape (leader) starts with at least 75 empty positions (equivalent to 330 mm). In order to fix the carrier tape a self adhesive tape of 20 to 50 mm is applied. At the end of the bandolier at least 40 empty positions (equivalent to 160 mm) are there.

Tape Specification for SOT-23 Surface Mount Device



Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5" 9" x 9" x 9"	12.0K 51.0K	17" x 15" x 13.5" 19" x 19" x 19"	192.0K 408.0K	12 kgs 28 kgs
	10K/reel	415 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	16 kgs

Customer Notes

Component Disposal Instructions

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
 - 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

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