

**SCHOTTKY BARRIER RECTIFIER**

**REVERSE VOLTAGE – 40 Volts**  
**FORWARD CURRENT – 2 Amperes**

**FEATURES**

- Metal silicon junction, majority carrier conduction
- For surface mounted application
- Low power loss, high efficiency
- High forward surge current capability
- Qualified according to MIL-STD-750

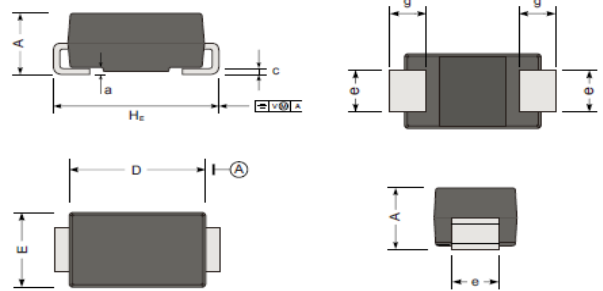
**APPLICATION**

- Low voltage high frequency inverters
- Polarity protection application
- Freewheeling diodes

**MECHANICAL DATA**

- Case: JEDEC DO-214AC
- Case Material: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".
- Moisture Sensitivity Level 1 per J-STD-020
- Polarity: Color band denotes cathode
- Lead free finish, RoHS compliant
- Weight: 60mg (Approximate)
- Marking code: B24AT

**SMA**



PIN	DESCRIPTION
1	Cathode
2	Anode

SMA		
DIM	MIN	MAX
A	1.90	2.20
D	4.00	4.50
E	2.30	2.70
H <sub>E</sub>	4.70	5.20
c	0.15	0.31
e	1.30	1.60
g	0.90	1.50
a	0.30	

All dimension in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	V
Maximum DC blocking voltage	V <sub>DC</sub>	40	V
Maximum Average rectified output current	I <sub>(AV)</sub>	2	A
Peak forward surge current 8.3ms single half sine-wave Superimposed on rated load.	I <sub>FSM</sub>	50	A
Operating junction Temperature range	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS		SYMBOL	MAX	UNIT
Forward voltage	I <sub>F</sub> =2A	T <sub>J</sub> =25°C	V <sub>F</sub>	0.55	V
Reverse Leakage current	V <sub>R</sub> =40V	T <sub>J</sub> =25°C T <sub>J</sub> =100°C	I <sub>R</sub>	0.5 5	mA
Typical junction capacitance (Note 1)			C <sub>J</sub>	220	pF

**THERMAL CHARACTERISTICS**

PARAMETER	SYMBOL	TYP	UNIT
Typical thermal resistance (Note 2)	R <sub>thJA</sub>	80	°C/W

**Note :**

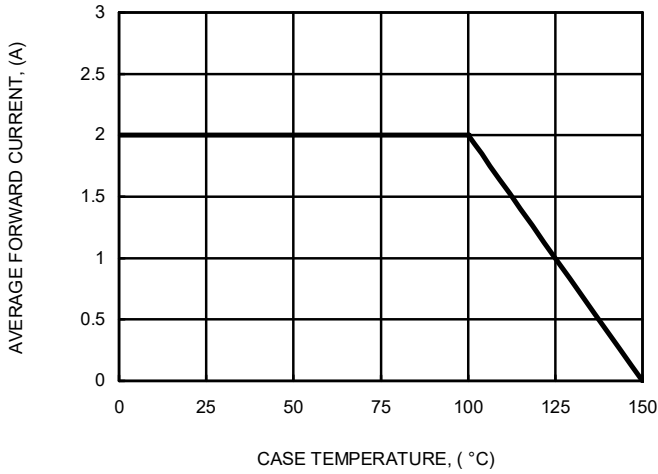
- (1) Measured at 1.0MHz and applied voltage of 4.0V DC.
- (2) P.C.B mounted with 2.0" x 2.0" (5 x 5 cm) copper pad areas.

REV.-1 ,Jul-2019, KSHA46

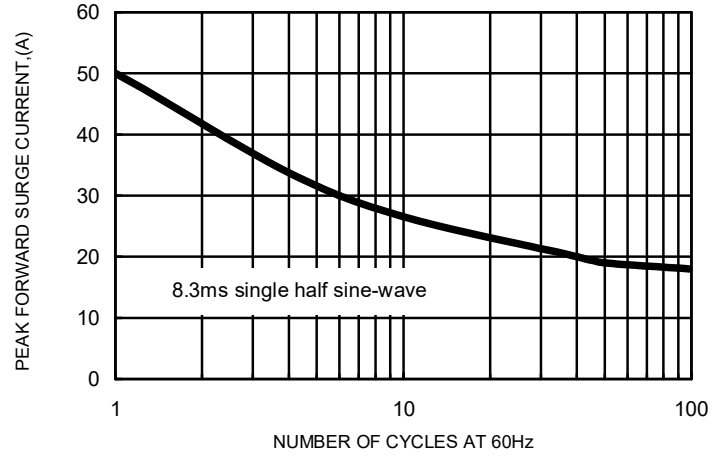
# RATING AND CHARACTERISTIC CURVES B240AT



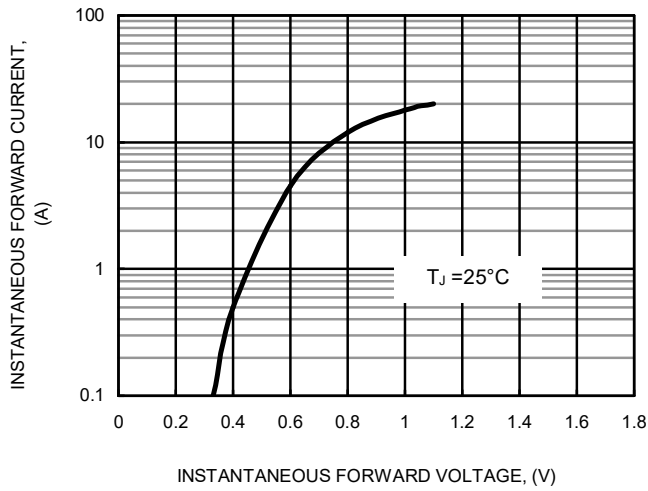
**FIG.1 FORWARD CURRENT DERATING CURVE**



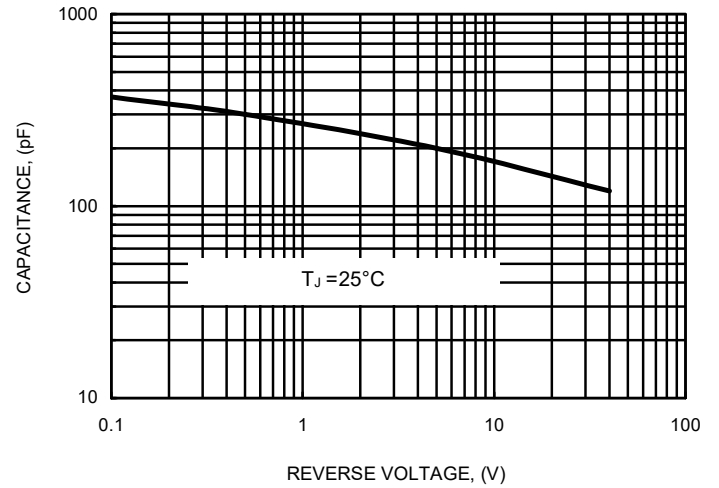
**FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT**



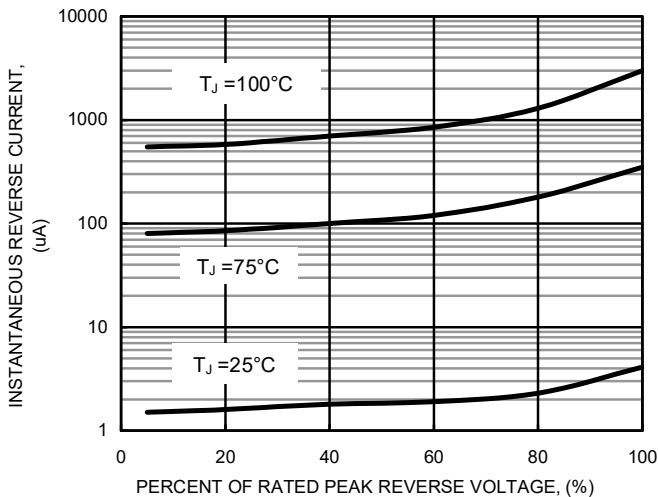
**FIG.3 TYPICAL FORWARD CHARACTERISTICS**



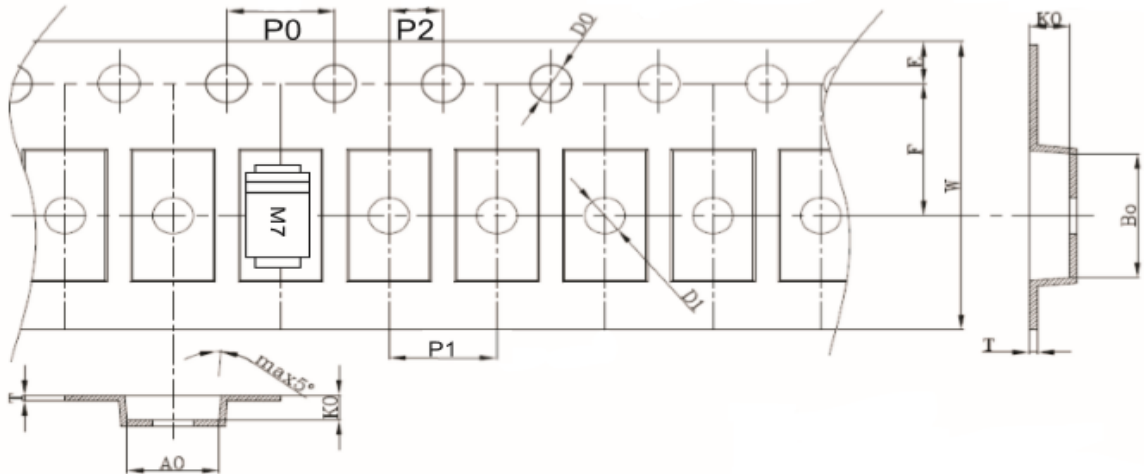
**FIG.4 TYPICAL JUNCTION CAPACITANCE**



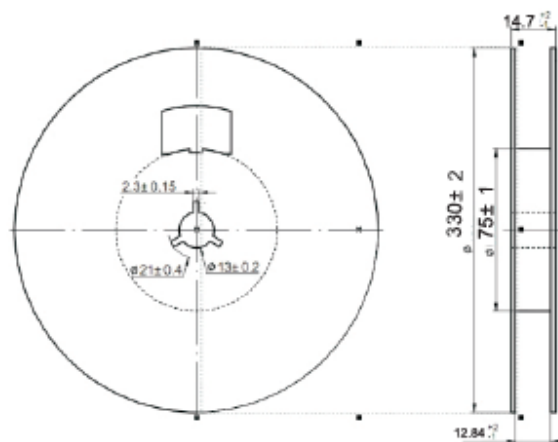
**FIG.5 TYPICAL REVERSE CHARACTERISTICS**



Embossed Carrier Dimensions Information:



TAPE SIZE	A0	B0	K0	P0	P1	P2	UNIT
12mm	2.70±0.10	5.33±0.10	2.35±0.10	4.00±0.10	4.00±0.10	2.00±0.10	mm
	T	E	F	D0	D1	W	
	0.20±0.03	1.75±0.10	5.5±0.05	1.55±0.05	1.55±0.05	12.0±0.3	



**PACKAGING INFORMATION**  
**B240AT**



**Packaging Information :**

DEVICE	Q'TY / REEL (PCS)	REEL DIA (mm)	BOX SIZE (mm)	Q'TY/BOX (PCS)	CARTON SIZE (mm)	Q'TY/CARTON (PCS)
B240AT	5K	330	340X340X40	10K	355X355X235	50K

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