

SURFACEMOUNTRECTIFIERS
S5ABT--S5MBT
FEATURES

- Low profile package
- For surface mounted applications
- High current capability
- Built-in strain relief, ideal for automated placement
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering: 250°C/10 seconds at terminals



Lead-free

MECHANICAL DATA

- Case: JEDEC SMBT, molded plastic over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD- 750, Method 2026
- Polarity: Color band denotes cathode end

Maximum Ratings(@TA = 25°C unless otherwise specified)

Characteristic	Symbol	S5ABT	S5BBT	S5DBT	S5GBT	S5JBT	S5KBT	S5MBT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RWS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	150							A

Thermal Characteristics

Characteristic	Symbol	S5ABT	S5BBT	S5DBT	S5GBT	S5JBT	S5KBT	S5MBT	UNITS
Operating temperature range	T_J	-55-----+150							°C
storage temperature range	T_{STG}	-55-----+150							°C

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	S5ABT	S5BBT	S5DBT	S5GBT	S5JBT	S5KBT	S5MBT	UNITS
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.15							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	10 250							μA



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PACKAGE OUTLINE DIMENSIONS

SMBT		
Dim	Min	Max
A	3.80	4.20
B	3.30	3.70
D	5.00	5.40
F	0.45	0.75
F1	2.55	2.95
H	1.10	1.30
I	1.85	2.15
I1	2.40	2.80
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
S5ABT--S5MBT	SMBT	4000/Tape&Reel



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FIG.1 -- FORWARD DERATING CURVE

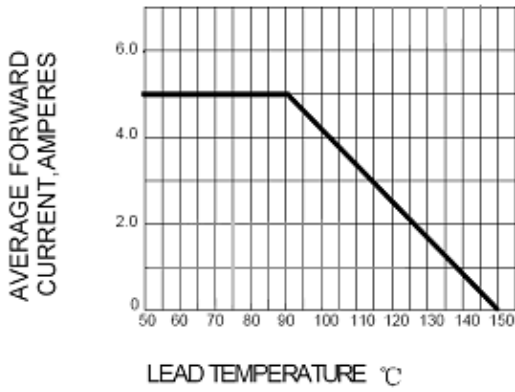


FIG.2 PEAK FORWARD SURGE CURRENT

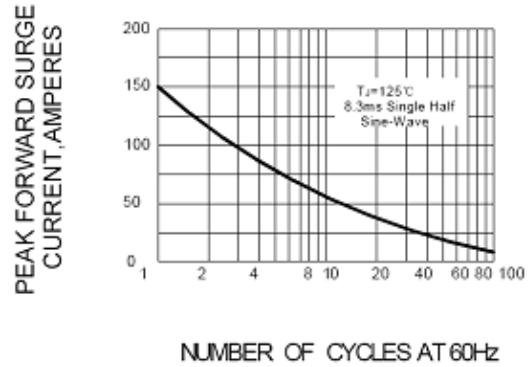


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

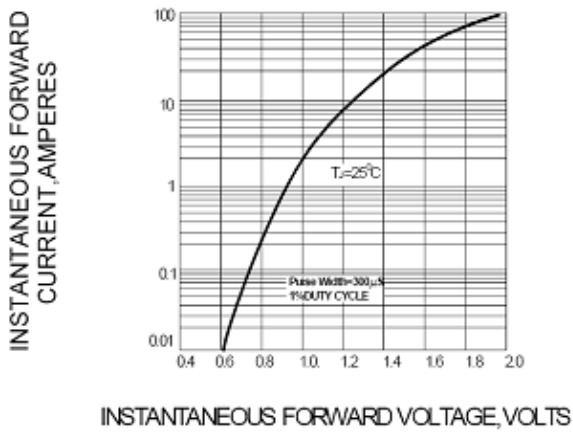


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

