SURFACE MOUNT SCHOTTKY
BARRIER RECTIFIERS

SS52BT--SS510BT

FEATURES

Lead-free

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- Guarding for overvoltage protection
- For use in low voltage high frequency inverters, free wheeling and polarity protection applications
- Plastic package has Underwriters Laborator Flammability Classification 94V-0
- High temperature soldering guaranteed:250℃/10 seconds at terminals

MECHANICAL DATA

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

Characteristic	Symbol	SS52 BT	SS53 BT	SS54 BT	SS55 BT	SS56 BT	SS58 BT	SS59 BT	SS510 BT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average for word rectified current at TL(SEEFIG.1)	$I_{F(AV)}$	5.0								A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	150								A

Thermal Characteristics

Characteristic	Symbol	SS52 BT	SS53 BT	SS54 BT	SS55 BT	SS56 BT	SS58 BT	SS59 BT	SS510 BT	UNITS
Operating temperature range	T_J	-55----+125					-55----+150			℃
Storage temperature range	T_{STG}	-55----+150								℃

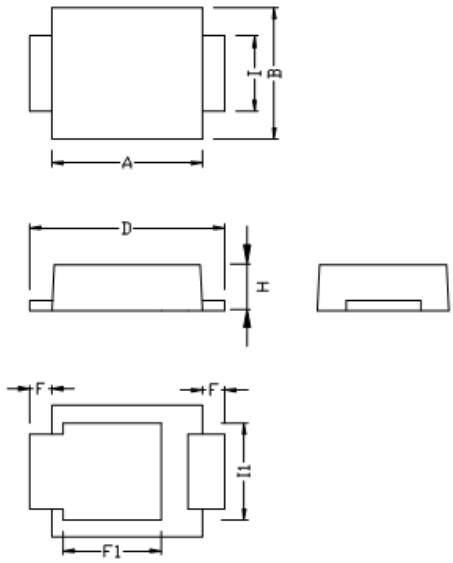
Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	SS52 BT	SS53 BT	SS54 BT	SS55 BT	SS56 BT	SS58 BT	SS59 BT	SS510 BT	UNITS
Maximum instantaneous forward voltage at 5.0	V_F	0.55			0.75		0.85			V
Maximum DC reverse current T_A=25℃ atrated DC blocking voltage T_A=100℃	I_R	0.5								m A
		20					10			

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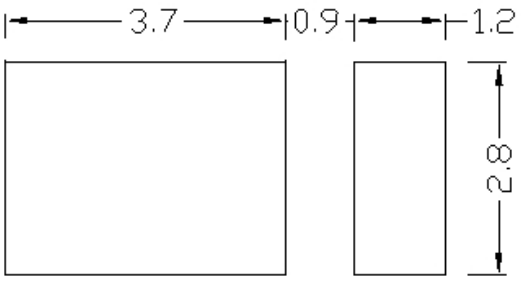
SS52BT--SS510BT

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		

SOLDERING FOOTPRINT



Unit ： mm

PACKAGE INFORMATION

Device	Package	Shipping
SS52BT--SS510BT	SMBT	4000/Tape&Reel

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FIG.1 – FORWARD DERATING CURVE

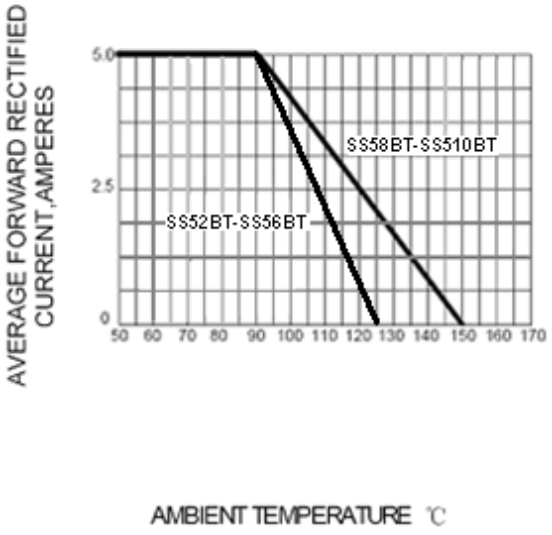


FIG.2– PEAK FORWARD SURGE CURRENT

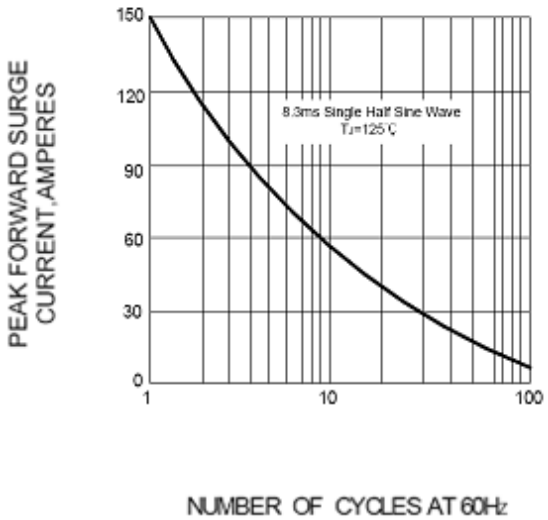


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

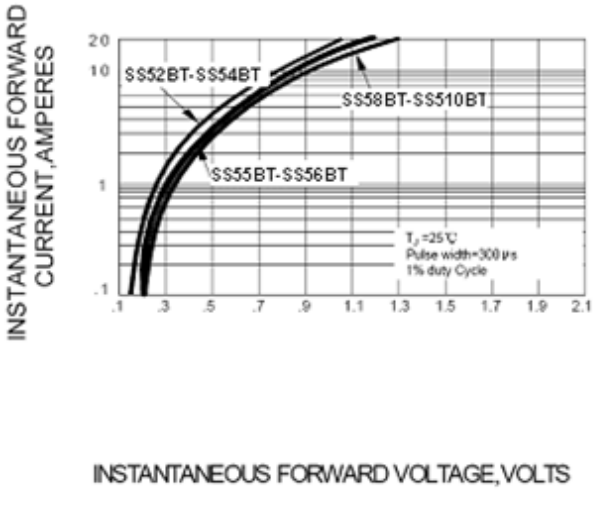


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

