SB52-SB56

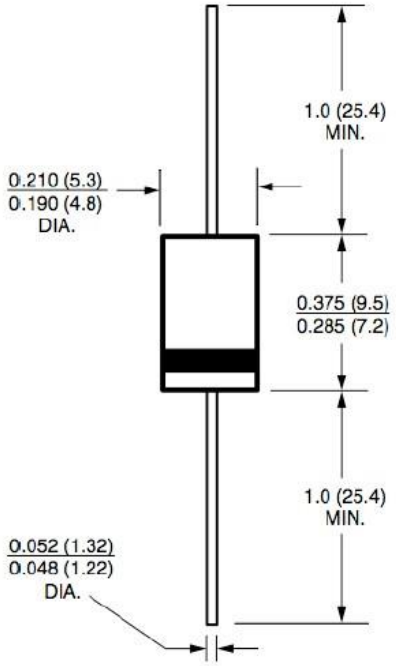
5.0 Amp Schottky Barrier Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction
- RoHS compliant package

Mechanical Data

- Case: DO-201AD,
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 1.10 grams(Approximately)

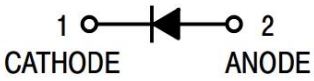


Packing & Order Information

3,000/Reel

RoHS
COMPLIANT

Graphic symbol



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings (Tc=25°C unless otherwise noted)							
		SB52	SB53	SB54	SB55	SB56	Unit
Device marking code		SB52	SB53	SB54	SB55	SB56	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	V
Maximum RMS voltage	VRWS	14	21	28	35	42	V
Maximum DC blocking voltage	VDC	20	30	40	50	60	V
Maximum average forward rectified current at TL=90°C	IF(AV)	5					A
Peak forward surge current 8.3ms single half-sine-wave	IFSM	100					A
Storage temperature range	TSTG	-55 to +150					°C

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Maximum Ratings (Tc=25°C unless otherwise noted)							
		SB52	SB53	SB54	SB55	SB56	Unit
Device marking code		SB52	SB53	SB54	SB55	SB56	
Maximum instantaneous forward voltage at IFM=1.0A (NOTE1)	VF	0.55			0.7		V
Maximum DC reverse current TJ=25°C	IR	0.5					V
At rated DC blocking voltage TJ=125°C		20					V

Thermal characteristics (Tc=25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Typical thermal resistance	RθJA	28	°C/W
	Rthjl	20	

Notes:

(1) L = 10mm

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■RATINGS AND CHARACTERISTIC CURVES

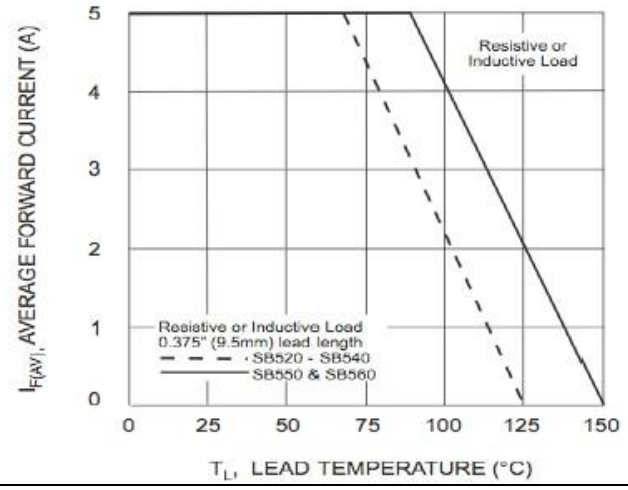

FIG. 1- FORWARD CURRENT DERATING CURVE

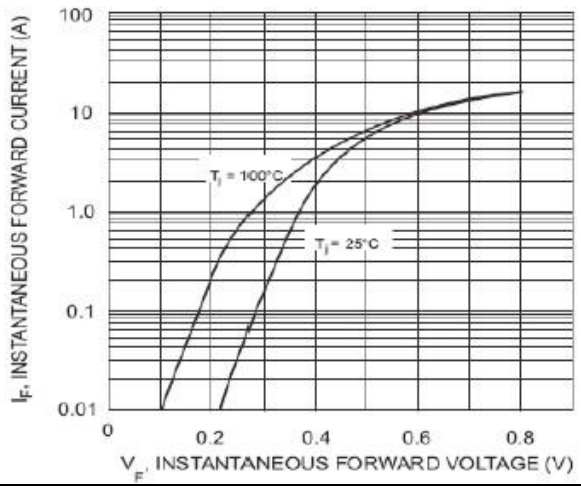

FIG. 2- TYPICAL FORWARD CHARACTERISTICS, SB502-SB504

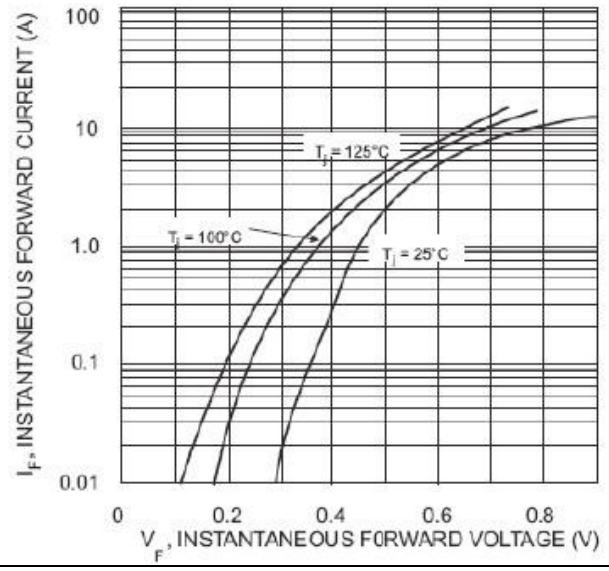

FIG. 3- TYPICAL FORWARD CHARACTERISTICS, SB505&SB506

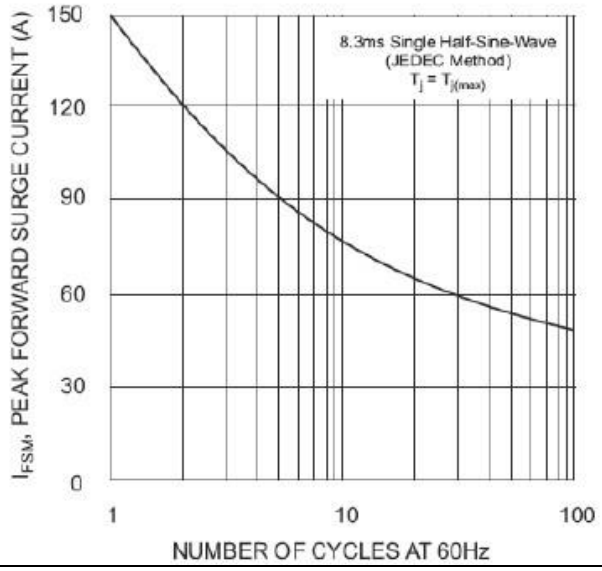

FIG. 4- MAX NON-REPETITIVE PEAK FWD SURGE CURRENT

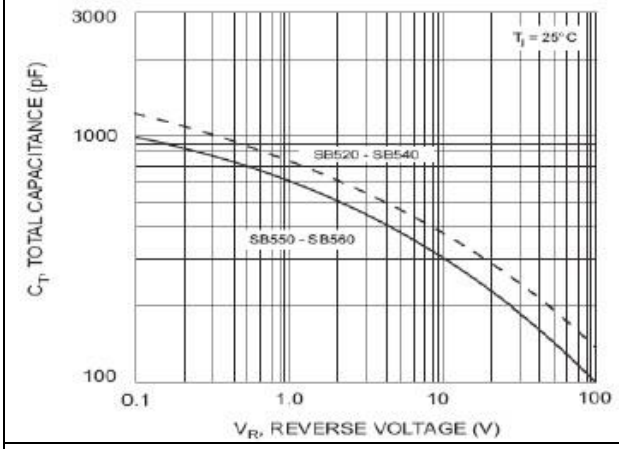

FIG. 3- TYPICAL TOTAL CAPACITANCE

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