

Surface Mounted Trench Schottky Barrier Rectifiers

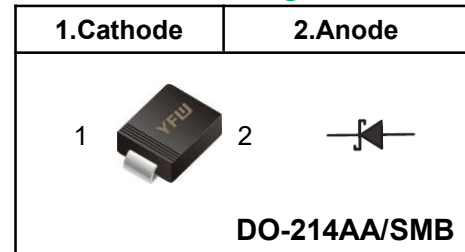
Reverse Voltage - 150 V

Forward Current - 5 A

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- Low forward voltage
- High forward surge current capability
- High temperature soldering guaranteed
260 C/10 seconds at terminals

Pinning



Marking Code

SSL515B	SSL515
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MECHANICAL DATA

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any
- Weight : 0.0035 ounce, 0.098 grams

Maximum Ratings and Electrical characteristics

Parameter	Symbols	SSL515B	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	150	A
Typical thermal resistance	R_{qJA} R_{qJL}	65 16	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Note: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

Electrical Characteristics($T_a = 25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Symbols	TYPE	MAX	UNITS
Maximum instantaneous forward voltage at 5.0A	V_F	0.78	0.85	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A = 25\text{ }^\circ\text{C}$	50	μA
		$T_A = 100\text{ }^\circ\text{C}$	20	mA

Typical Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

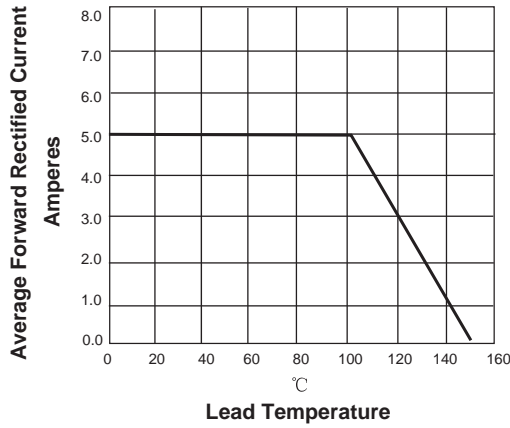


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

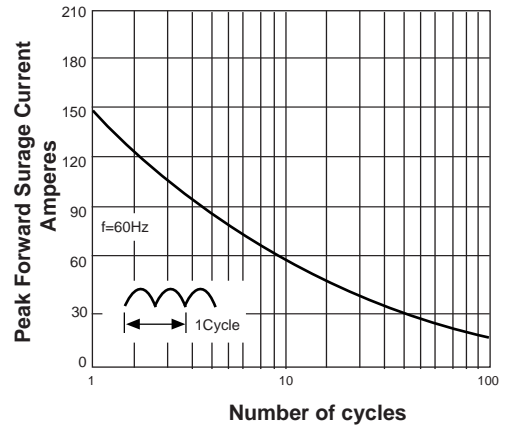


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

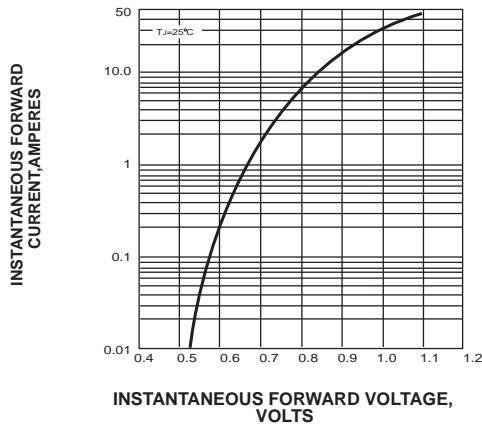
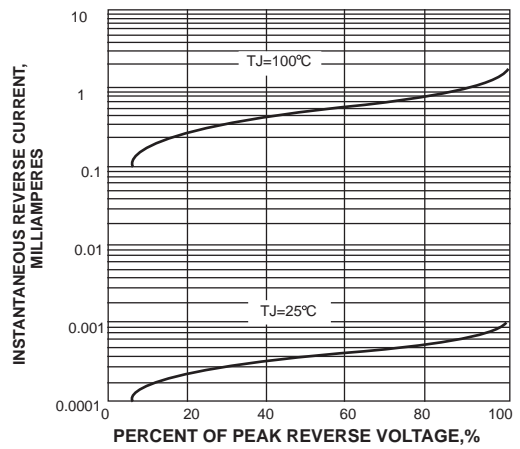


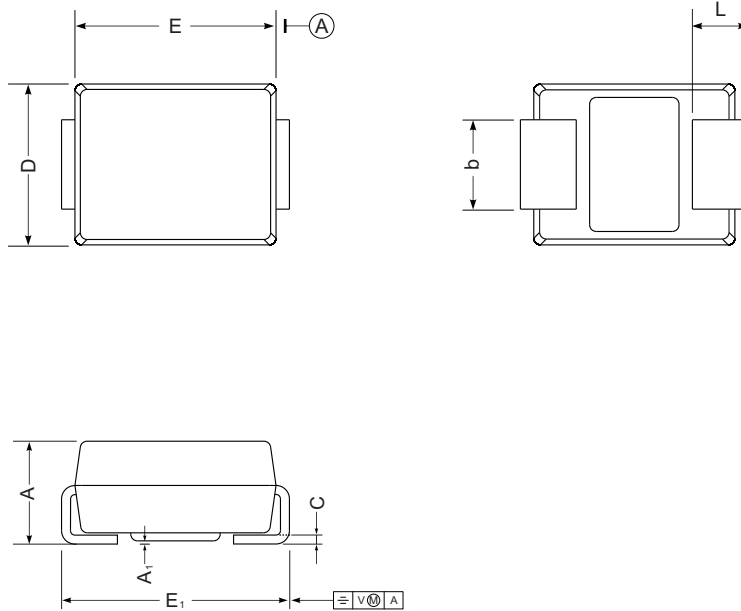
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline

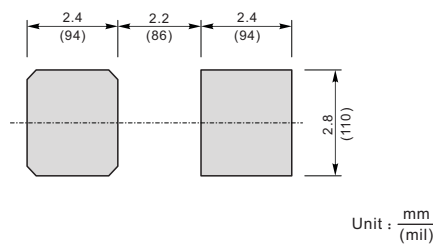
DO-214AA SMB

Plastic surface mounted package; 2 leads



UNIT		A	E	D	E ₁	A ₁	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

The recommended mounting pad size



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AA SMB	Tape/Reel, 13" reel	3000	EIA-481-1