XWS®

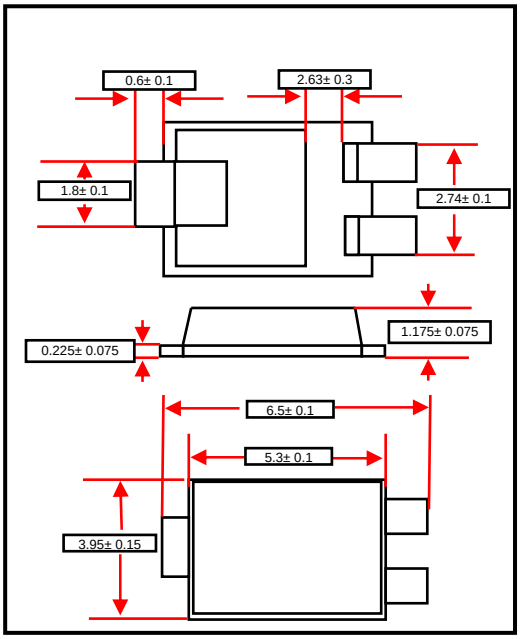
SR1045L LOW VF SCHOTTKY BARRIER RECTIFIER

FEATURES

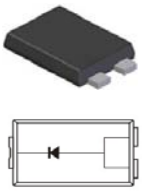
- Ideal for Automated Placement
- High Performance Forward Voltage Drop
- Low Power Losses,High Efficiency Operation
- Fast Switching Capability
- Low Thermal Resistance Package
- High Operating Junction Tempera
- Plastic Case Material has UL Flammability Classification Rating 94V-O

TO-277M

Unit:inch(mm)



MECHANICAL DATA



- Case: TO-277M molded Plastic
- Terminals:Solderable per MIL-STD-750,Method 2026
- Polarity:
- Weight:0.090 grams(approx)
- Lead Free:For RoHS/Lead Free Version, Green molding compound as per IEC61249 Std

Maximum Ratings and Electrical Charateristics @T_A=25℃ unless otherwise specified

Characteristic	Symbol	VALUE				Unit
Maximum repetitive peak reverse voltage	V_{RRM}	**45**				V
Maximum RMS voltage	V_{RMS}	**32**				V
Maximum DC blocking voltage	V_R	**45**				V
Maximum average forward rectified current	$I_{F(AV)}$	**10**				A
Peak forward surge current:8.3ms single half sine-wave superimposed on rated load	I_{Fsm}	275				A
PARAMETER	Symbol	TEST CONDITIONS		MIN.	TYP.	MAX.	Unit
Breakdown voltage	V_{BR}	I_R=0.5mA T_A=25℃		45	_	_	V
Instantaneous forward voltage	V_F	I_F=3A		_	0.34	_	V
		I_F=5A	T_A=25℃	_	0.38	_	
		I_F=10A		_	0.44	0.47	
		I_F=3A		_	0.27	_	V
		I_F=5A	T_A=125℃	_	0.32	_	
		I_F=10A		_	0.41	_	
Reverse current	I_R	VR=36V	T_A=25℃	_	32	_	uA
		VR=45V	T_A=25℃	_	_	0.25	mA
		VR=45V	T_A=125℃		8.6	---	mA
Typical Thermal Resistance(Note1)	$R_{\theta JL}$ $R_{\theta JA}$	8 60					℃/W
Operating temperature range	T_J	-55 to + 125					℃
Storage temperature range	T_{STG}	-55 to + 150					℃

Note:

(1)Mounted on 48c㎡ FR-4 PCB

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RATING AND CHARACTERISTIC CUEVES

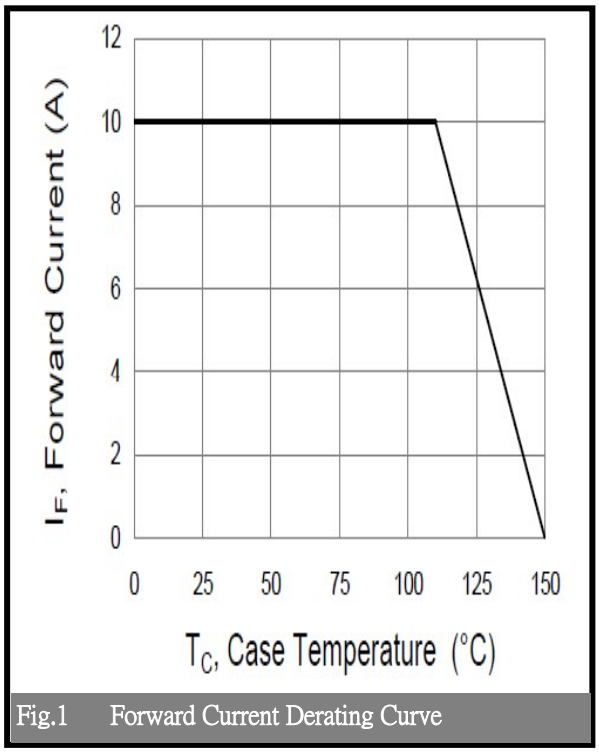

Fig.1 Forward Current Derating Curve

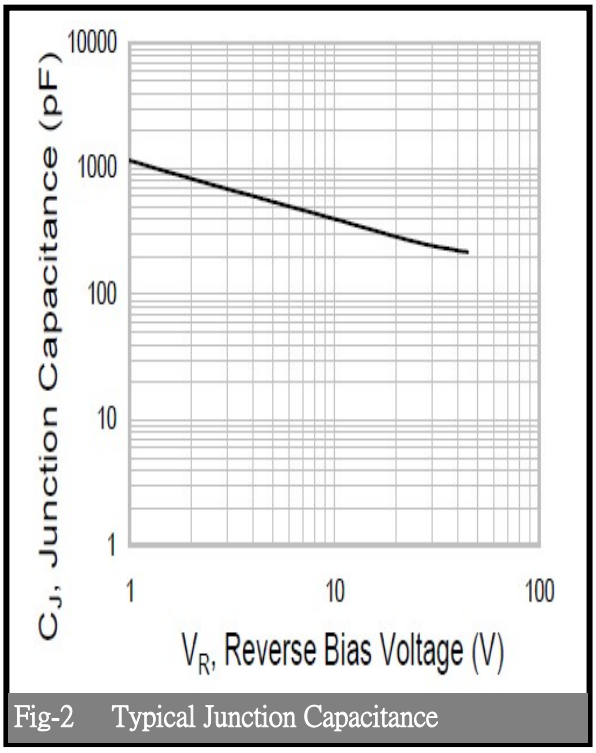

Fig-2 Typical Junction Capacitance

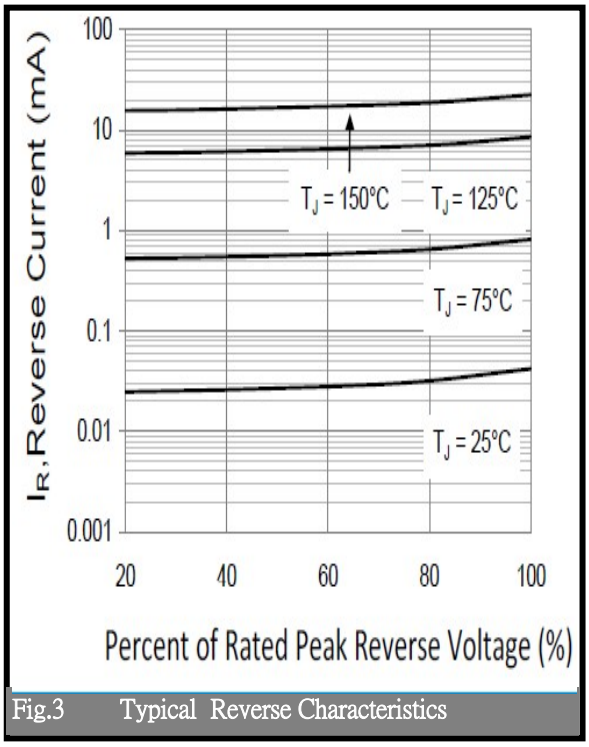

Fig.3 Typical Reverse Characteristics

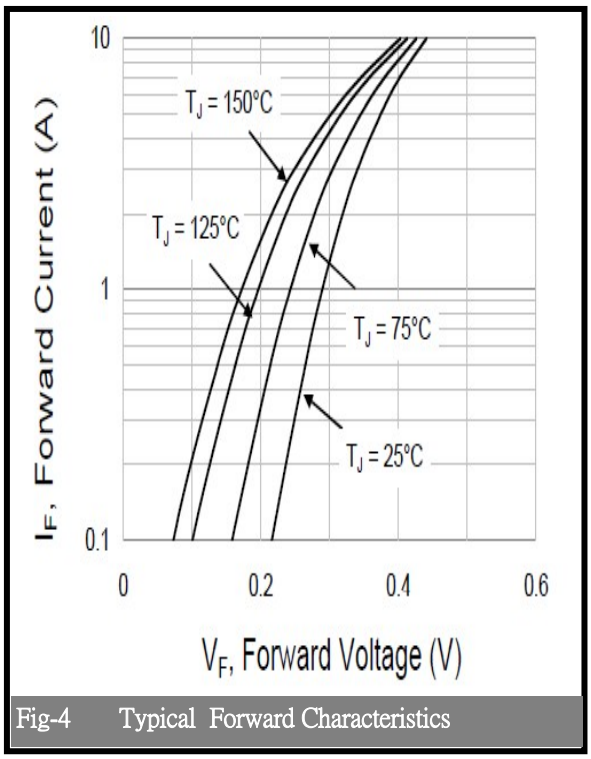

Fig-4 Typical Forward Characteristics