



SS54AL LOW VF SCHOTTKY BARRIER RECTIFIER

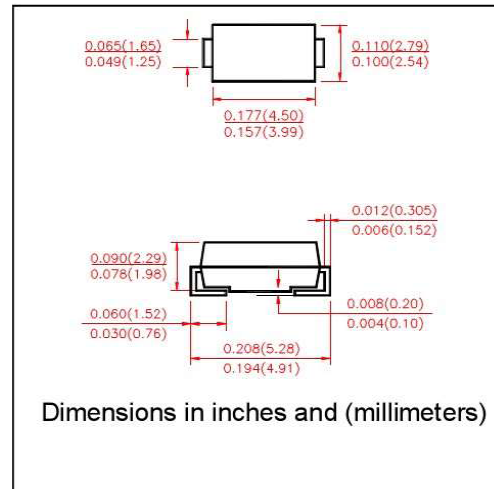
FEATURES

- Low VF Schottky Barrier Chip
- Ideally Suited for Automated Assembly
- Low Power Loss,High Efficiency
- High Surge capacity
- For use in Low Voltage Application
- Low profile package
- Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- Case: SMA/DO-214AC molded Plastic
- Terminals:Solder Plated,Solderable per MIL-STD-750,Method 2026
- Polarity:Cathode Band or Cathode Notch
- Weight:0.085 grams(approx)
- Lead Free:For RoHs/Lead Free Version, Green molding compound as per IEC61249 Std

DO-214AC(SMA)



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	VALUE				Unit
Maximum repetitive peak reverse voltage	V _{RRM}	40				V
Maximum RMS voltage	V _{RMS}	28				V
Maximum DC blocking voltage	V _R	40				V
Maximum average forward rectified current	I _{F(AV)}	5				A
Peak forward surge current:8.3ms single half sine-wave superimposed on rated load	I _{Fsm}	100				A
PARAMETER	Symbol	TEST CONDITIONS	MIN.	TYP.	MAX.	Unit
Breakdown voltage	V _{BR}	I _R =1mA	40	—	—	V
Instantaneous forward voltage	V _F	I _F =1A I _F =3A T _J =25	—	0.34	—	V
		I _F =5A	—	0.44	0.46	
		I _F =1A I _F =3A T _J =125	—	0.21	—	V
		I _F =5A	—	0.30	—	
			—	0.36	—	
Reverse current	I _R	VR=32V	—	60	—	uA
		VR=40V T _J =25°C	—	—	200	uA
		VR=40V T _J =125°C	—	25	---	mA
Typical Thermal Resistance(Note1)	R _{θJL}	15				°C/W
	R _{θJA}	62.5				
Operating temperature range	T _J	-55 to + 125				°C
Storage temperature range	T _{STG}	-55 to + 150				°C

Note: 1. Mounted on an FR4 PCB, single-sided copper, with 48cm²copper pad area.
2. Mounted on an FR4 PCB, single-sided copper, mini pad.



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RATING AND CHARACTERISTIC CUEVES

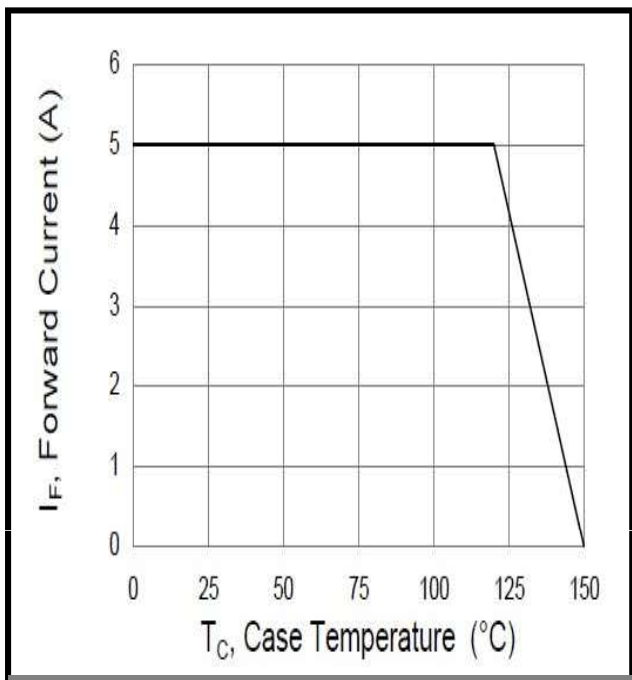


Fig.1 Forward Current Derating Curve

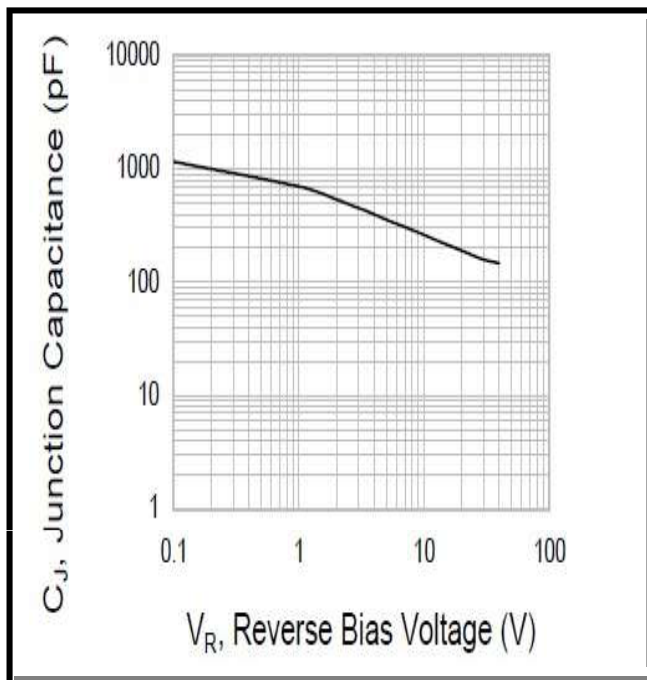


Fig-2 Typical Junction Capacitance

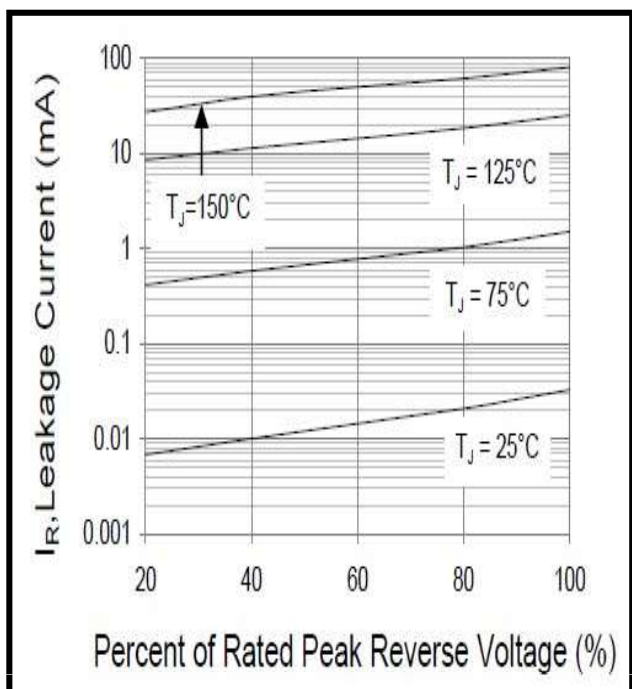


Fig.3 Typical Reverse Characteristics

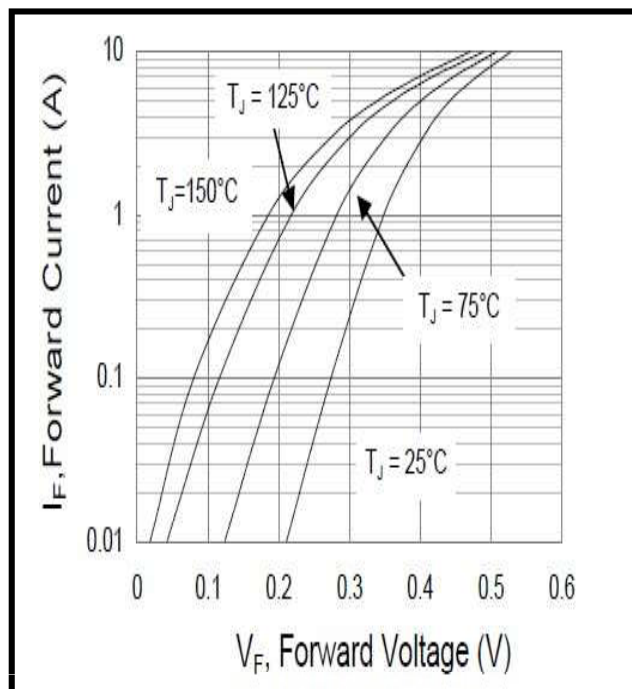


Fig-4 Typical Forward Characteristics