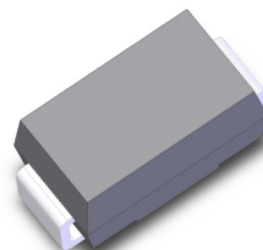


Features

- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- AEC-Q101 qualified



DO-214AC(SMA)

Typical Applications

For use in low voltage,high frequency inverters,free wheeling, and polarity protection application

Maximum Ratings (TA = 25 °C unless otherwise noted)					
Parameter	Symbol	SL52A	SL53A	SL54A	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IF(AV) ¹⁾	5.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	150			A
Rating for fusing(t<8.3ms)	I ² t	93.8			A ² sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 125			°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter	Test Conditions	Symbol	SL52A	SL53A	SL54A	Unit
Minimum Breakdown voltage	Ta=25°C,IR=1mA	V _{BR}	20	30	40	Volts
Maximum Instantaneous forward voltage	IF=3A, Ta=25°C		0.45			
	IF=5A, Ta=25°C		0.50			
	IF=5A, Ta=125°C		0.4			
Maximum DC reverse current at rated DC blocking voltage	Ta=25°C	IR	150			uA
	Ta=100°C		20			mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	290			pF
Typical thermal resistance	junction to mount	R _{θJL} ¹⁾	20			°C/W

Note1):Mounted on PCB with 8.0×8.0mm copper pads,2 OZ,FR4 PCB;

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

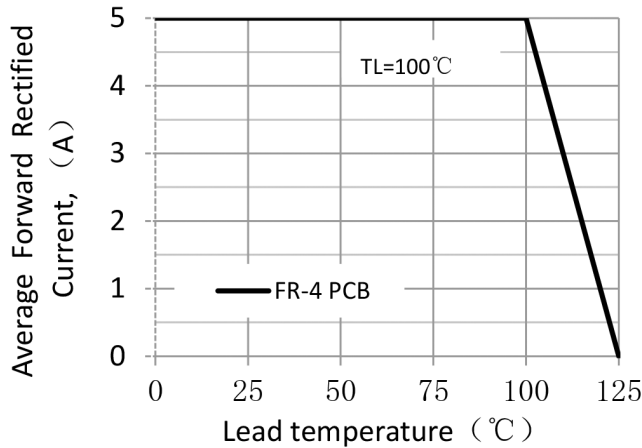


Figure 1. Forward Current Derating Curve

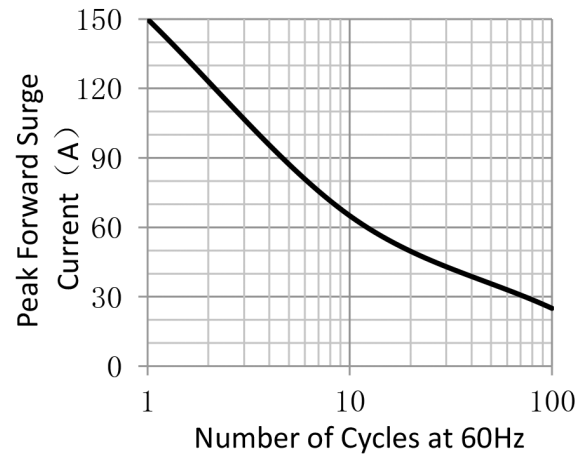


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

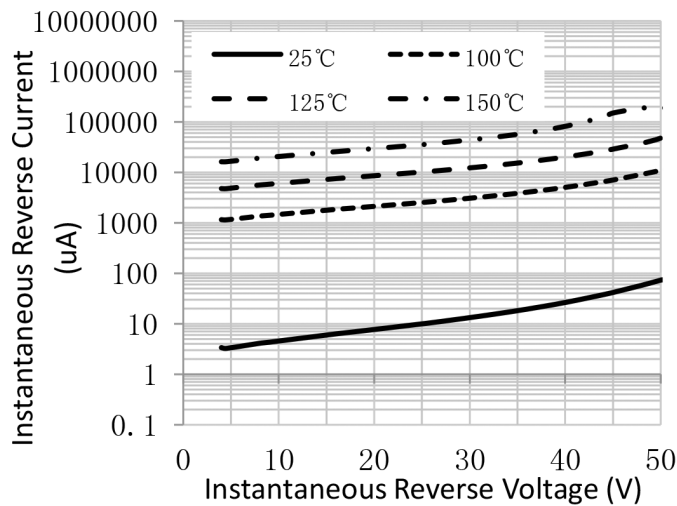


Figure 3. Typical Reverse Characteristics

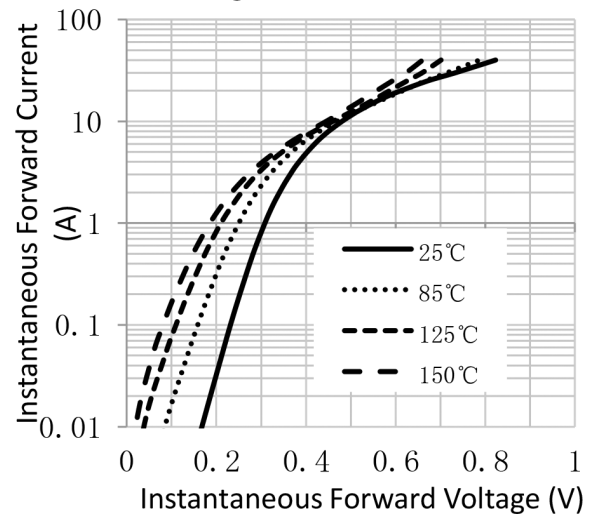


Figure 4. Typical Instantaneous Forward Characteristics

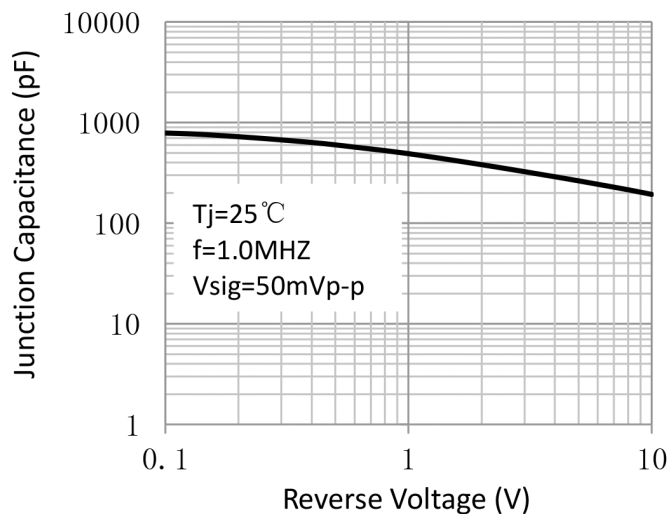
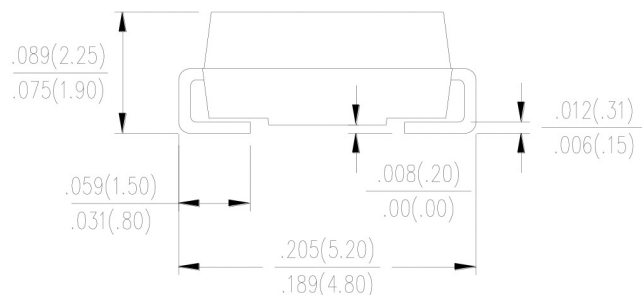
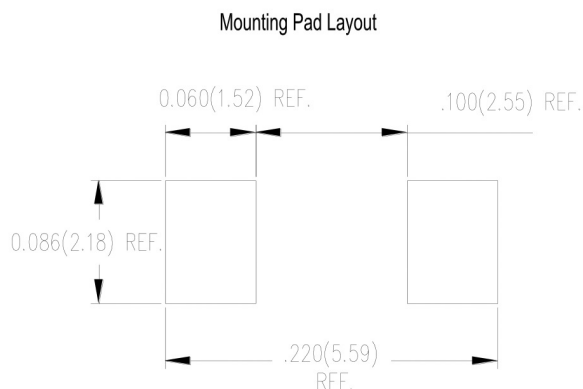
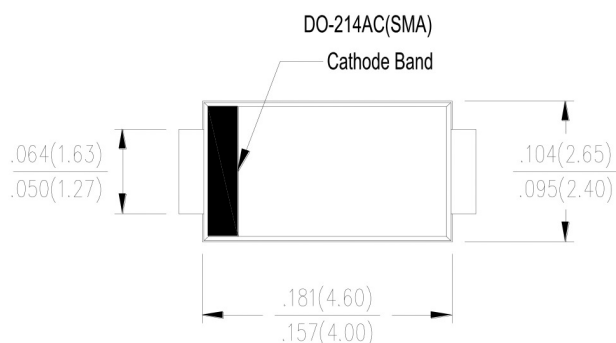


Figure 5. Typical Junction Capacitance

Package Outline Dimensions

in inches (millimeters)

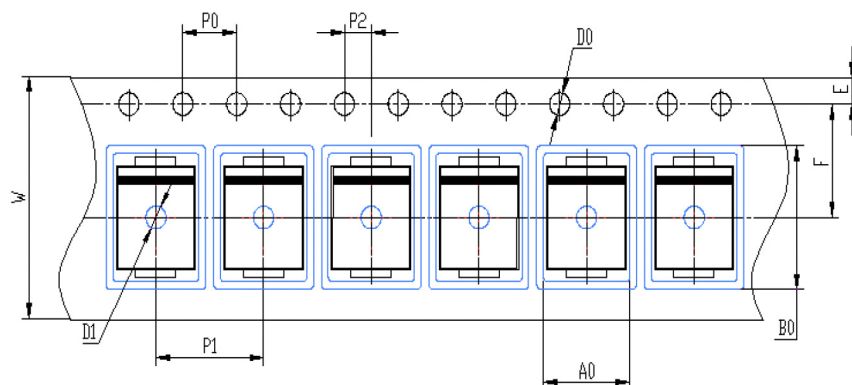


Packing Information

Packing quantities:

7500 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMA(mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1