Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SK52 - S510



DO-214AB (SMC)
Surface Mount Package

For use in Low Voltage, High Frequency Inverters, Free Wheeling Diodes and Polarity Protection Applications

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25ºC ambient temperature unless specified otherwise. Resistive or Inductive Load.

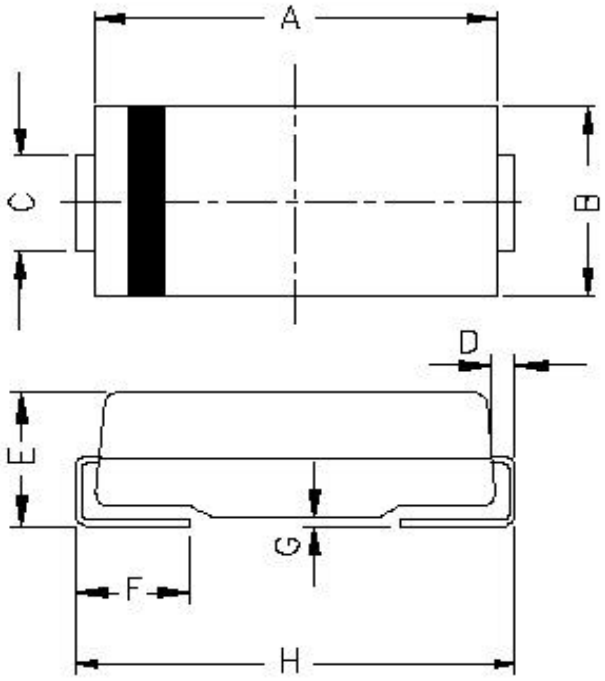
DESCRIPTION	SYMBOL	SK52	SK53	SK54	SK55	SK56	SK58	SK59	S510	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	64	71	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current Lead Length at T_L=75°C	$I_{(AV)}$	5.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100.0								A
Maximum Instantaneous Forward Voltage I_F=5.0A	*V_F	0.50			0.70		0.85			V
Maximum DC Reverse Current T_a=25°C	*I_R	0.5								mA
Rated DC Blocking Voltage T_a=100°C		20								mA
Thermal Resistance Junction to Ambient	**$R_{th\ (j-a)}$	TYP55								ºC/W
Thermal Resistance Junction to Lead	**$R_{th\ (J-L)}$	TYP17								ºC/W
Operating Junction Temperature Range	T_j	- 55 to +125								ºC
Storage Temperature Range	T_{stg}	- 55 to +150								ºC

*** Pulse Test With PW=300ms, 1% Duty Cycle.**

**** Mounted on PCB with 0.55" x 0.55" (14 x 14mm) Copper Pad Area**

SK52_S510Rec290405E

PACKAGE DO-214AB (SMC)



DIM	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.75	3.25
D	0.152	0.305
E	2.00	2.62
F	0.76	1.27
G	0.051	0.203
H	7.75	8.13

DIMENSIONS ARE IN mm

PACKING:- 1.8K / REEL(7" 178mm)
PACKING:- 7.5K / REEL(13" 330mm)

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.

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Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdilsemi.com