



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

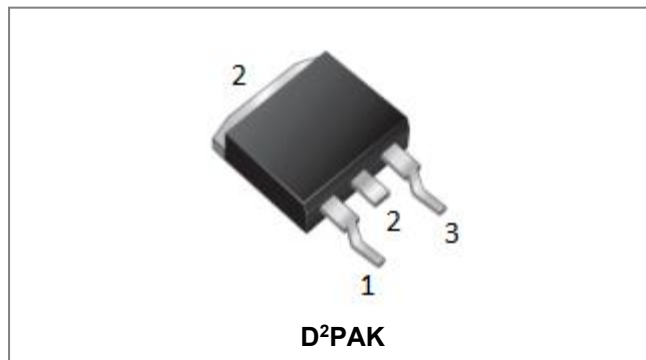
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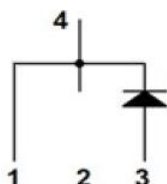
SK1840D SCHOTTKY RECTIFIER



Features

- 150°C T_J operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	-	40	V
Average Rectified Forward Current	I _{F (AV)}	50% duty cycle @T _c =105°C, rectangular wave form	18	A
Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3ms, Half Sine pulse	280	A

Electrical Characteristics:

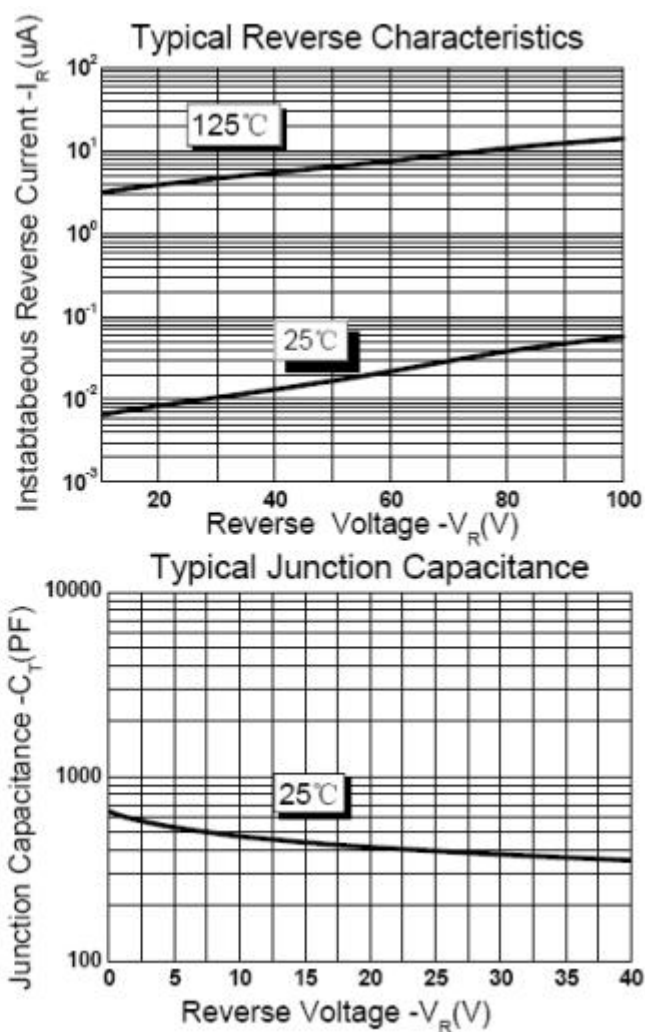
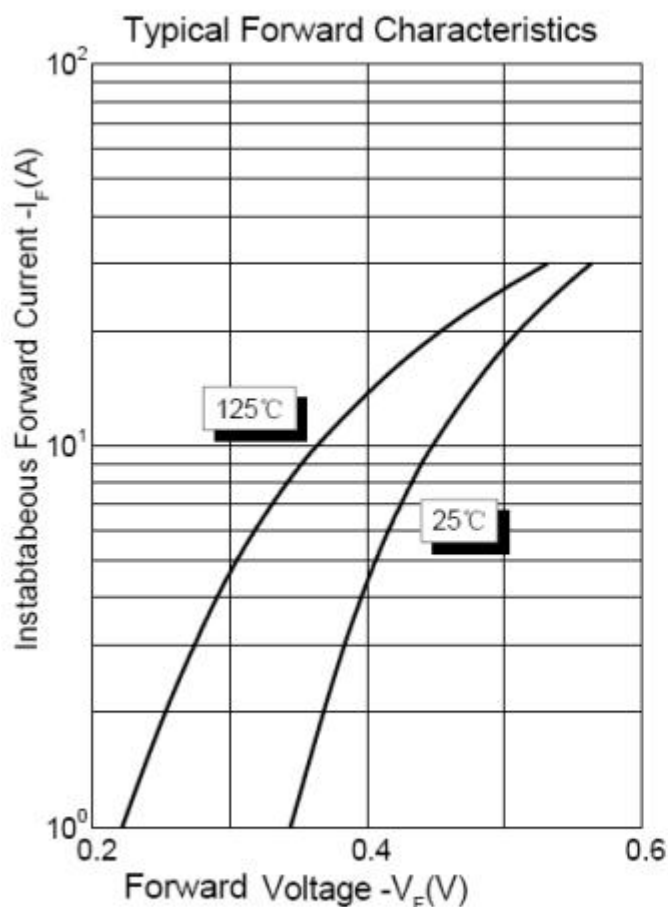
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V _{F1}	@ 5.0A, Pulse, T _J = 25 °C	0.41	0.50	V
	V _{F2}	@ 18A, Pulse, T _J = 25 °C	0.50	0.58	V
Reverse Current *	I _{R1}	@V _R = rated V _R , T _J = 25 °C	0.0001	0.5	mA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	0.006	30	mA
Junction Capacitance	C _T	@V _R = 5.0V, T _C = 25 °C f _{SIG} = 1MHz	500	800	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

* Pulse width < 300 μs, duty cycle < 2%

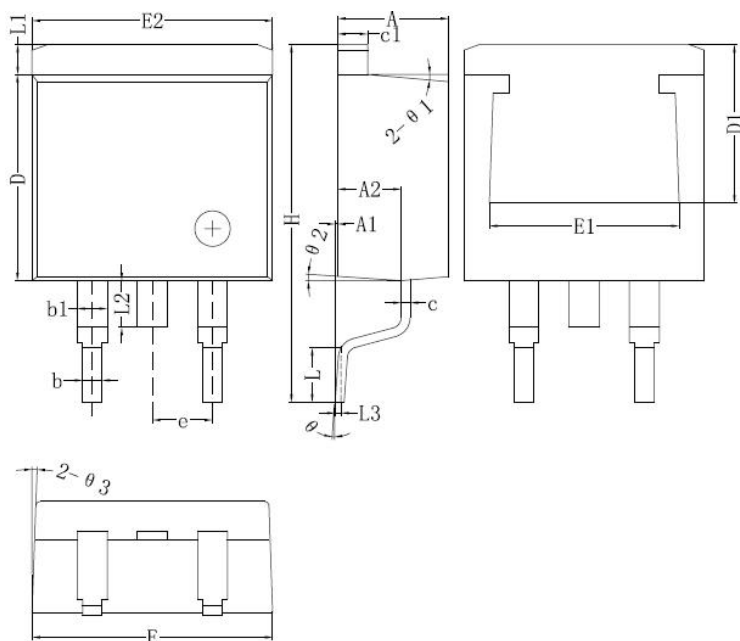
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	°C
Storage Temperature	T_{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	-	6	°C/W
Approximate Weight	wt	-	1.85	g
Case Style	D2PAK			

Ratings and Characteristics Curves



Mechanical Dimensions D²PAK



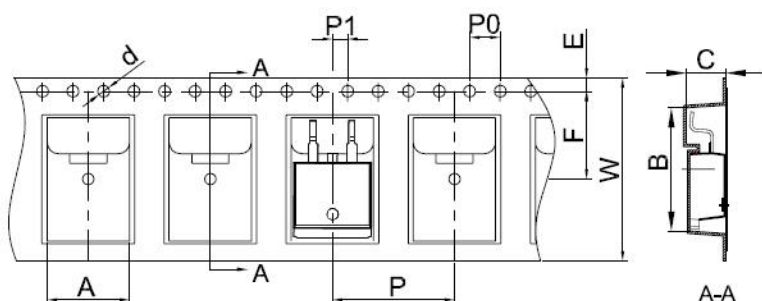
Symbol	Dimensions in millimeters		
	Min.	Typical	Max.
A	4.47	4.70	4.85
A1	0	0.10	0.25
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1	1.17	1.27	1.37
c	0.31	0.38	0.61
c1	1.17	1.27	1.37
D	8.50	8.70	8.90
D1	6.40		
E	10.01	10.16	10.31
E1	7.6		
E2	9.98	10.08	10.31
e		2.54	
H	14.6	15.1	15.6
L	2.00	2.30	2.74
L1	1.12	1.27	1.42
L2	1.30		2.20
L3		0.25BSC	
e	0	-	8°
e1		5°	
e2		4°	
e3		4°	

Ordering Information

Device	Package	Shipping
SK1840D	D ² PAK (Pb-Free)	800pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Carrier Tape & Reel Specification D²PAK

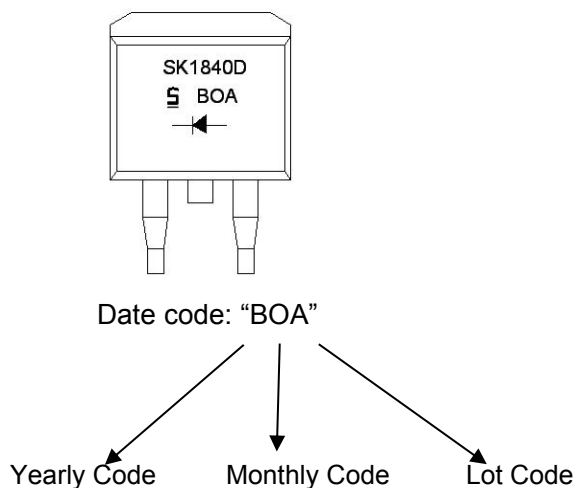


SYMBOL	Millimeters	
	Min.	Max.
A	10.70	10.90
B	16.03	16.23
C	5.11	5.31
d	1.45	1.65
E	1.65	1.85
F	11.40	11.60
P0	3.90	4.10
P	15.90	16.10
P1	1.90	2.10
W	23.90	24.30

Marking Diagram

First row: part number
 Second row: the Semikron logo and date code
 Third row: topology

For example,



Date Code Description

Yearly Code

Year	code	Year	code	Year	code	Year	code	Year	code	Year	code
1998	K	2003	R	2008	W	2013	D	2018	K	2023	R
1999	L	2004	S	2009	X	2014	E	2019	L	2024	S
2000	M	2005	T	2010	A	2015	F	2020	M	2025	T
2001	N	2006	U	2011	B	2016	G	2021	N	2026	U
2002	P	2007	V	2012	C	2017	H	2022	P	2027	V

Monthly Code

Month	January	February	March	April	May	June
code	1	2	3	4	5	6
Month	July	August	September	October	November	December
code	7	8	9	O	N	D

Lot Code

Lot number is from 0 to 9 and A to Z.

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