

M·C·C·

Micro Commercial Components



Micro Commercial Components
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**SK42BL
THRU
SK44BL**

Features

- High Surge Capability
- Very low forward voltage drop
- Halogen free available upon request by adding suffix "-HF"
- Low power losses, high efficiency
- Guardring for overvoltage protection
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 23°C/W Junction To Lead
70°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK42BL	SK42L	20V	14V	20V
SK43BL	SK43L	30V	21V	30V
SK44BL	SK44L	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

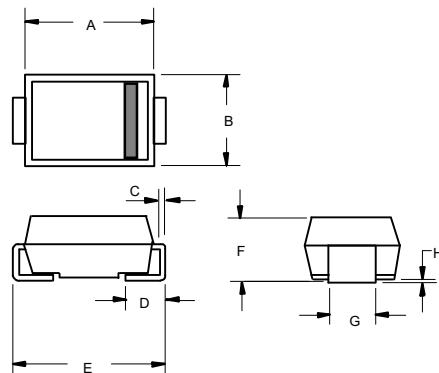
Average Forward Current	$I_{F(AV)}$	4.0A	$T_L = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* SK42BL~SK44BL	V_F	.45V	$I_{FM} = 4.0\text{A}; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage*	I_R	0.5mA 45mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

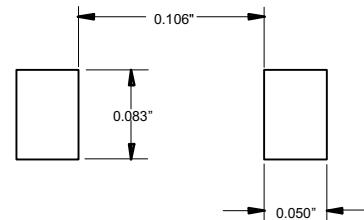
**4 Amp Schottky
Rectifier
20 to 40 Volts**

**DO-214AA
(SMB) (LEAD FRAME)**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.096	2.00	2.44	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

SUGGESTED SOLDER PAD LAYOUT



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SK42BL thru SK44BL

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RATINGS AND CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

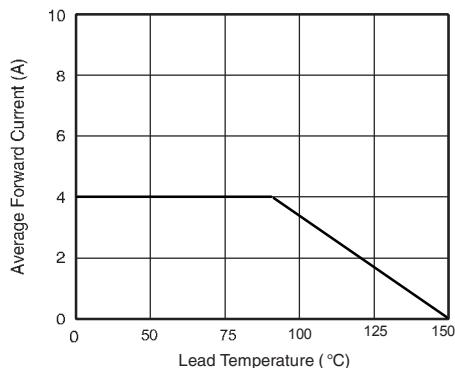


Figure 1. Forward Current Derating Curve

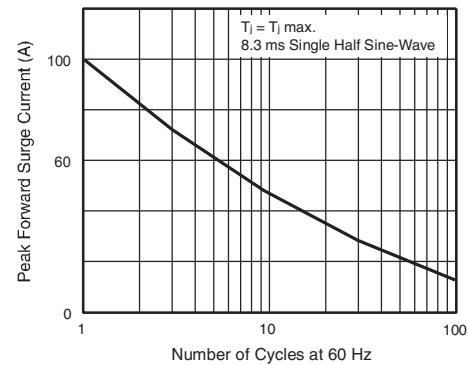


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

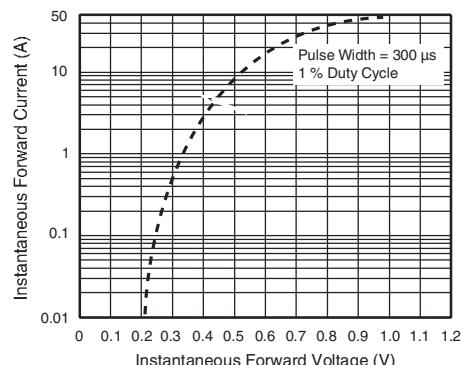


Figure 3. Typical Instantaneous Forward Characteristics

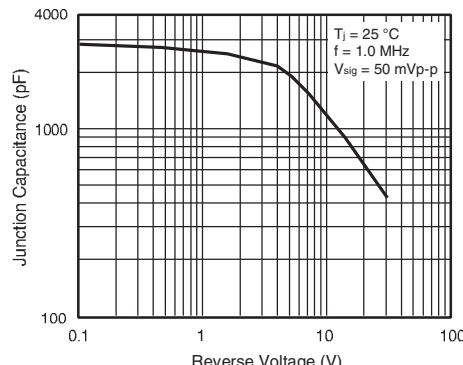


Figure 5. Typical Junction Capacitance

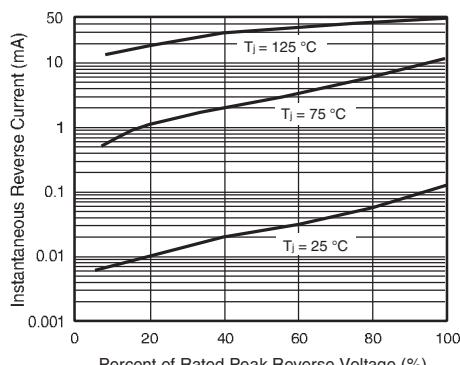


Figure 4. Typical Reverse Characteristics

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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