

Features

- Halogen Free. "Green" Device (Note 1)
- Fully Automotive Qualified to AEC-Q101
- Low Profile Package
- High Surge Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

3 Amp Surface Mount Schottky Rectifier 40 to 60 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

			Value		
Parameter	Symbol	SK34BQ-L	SK36BQ-L	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}				
Working Peak Reverse Voltage	V _{RWM}	40	60	V	
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{RMS}	28	42	V	
Average Rectified Forward Current @ T _L =105°C	I _{F(AV)}	3		А	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I _{FSM}	80		А	
Current Squared Time @ 1ms≤t≤8.3ms	l ² t	26.56		A ² s	

Marking code

Part Number	Marking code
SK34BQ-L	SK34B
SK36BQ-L	SK36B

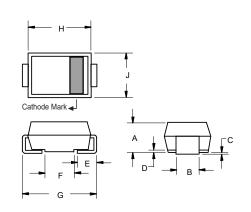
Internal Structure

Pin	Description	Simplified outline	Graphic symbol
1	cathode	MCC XXXX 2	
2	anode	XXXX = Marking code	1 0
		YYWW = Date Code	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

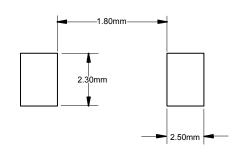
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

DO-214AA (SMB) (LEAD FRAME)



	DIMENSIONS					
DIM	INC	HES	MM		NOTE	
Dilvi	MIN	MAX	MIN	MAX	NOIL	
Α	0.079	0.103	2.00	2.62		
В	0.075	0.087	1.91	2.21		
С	0.002	0.008	0.05	0.20		
D	0.006	0.012	0.15	0.31		
Е	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.200	0.220	5.08	5.59		
Н	0.160	0.191	4.06	4.85		
J	0.130	0.155	3.30	3.94		

Suggested Solder Pad Layout





Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _J	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
Rth _(J-L)	Thermal Resistance from Junction to Lead	Note 1		22		°C/W
Rth _(J-A)	Thermal Resistance from Junction to Ambient	Note 1		63		°C/W

Note:

Electrical Characteristics @ 25°C Unless Otherwise Specified

Paramet	er	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage							
	SK34BQ-L	V _F	$I_F=3A;T_J=25^{\circ}C$		0.48	0.50	
			$I_F=3A;T_J=125$ °C		0.41	0.45	V
	SK36BQ-L		I _F =3A;T _J =25°C		0.60	0.70	
			I _F =3A;T _J =125°C		0.54	0.63	
Reverse Current							
	SK34BQ-L	I _R	at Rated V _R ;T _J =25°C			0.1	mA
			at Rated V _R ;T _J =125°C			30	
	SK36BQ-L		at Rated V _R ;T _J =25°C			0.1	
			at Rated V _R ;T _J =125°C			10	
Junction Capacitano	се						
	SK34BQ-L SK36BQ-L	CJ	$V_R=4V; f=1MHz; T_J=25$ °C		150 132		pF

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^{1.}Mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas.



Curve Characteristics

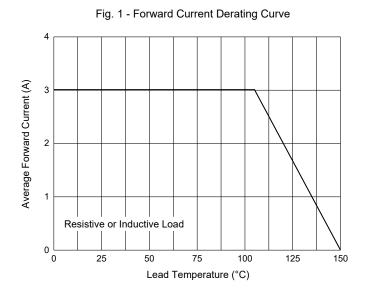


Fig. 3 - Typical Forward Characteristics

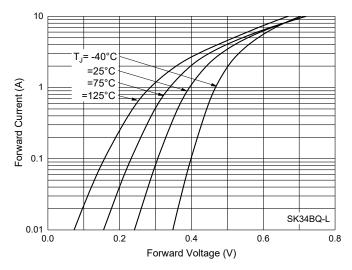


Fig. 5 - Typical Forward Characteristics

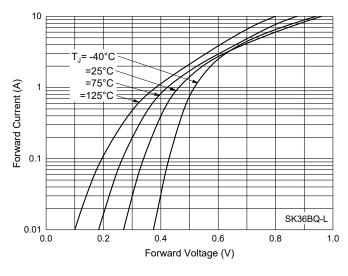


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

(V) 80

(A) 80

(B) 80

(B) 80

(B) 80

(C) 80

(C) 80

(D) 80

(E) 80

(E

Fig. 4 - Typical Reverse Leakage Characteristics

Number of Cycles at 60 Hz

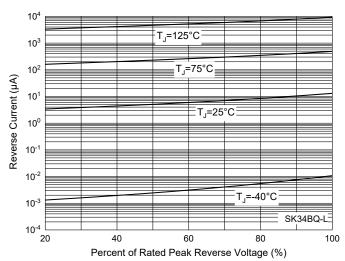
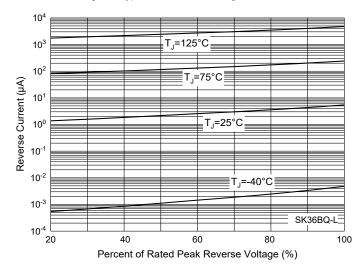


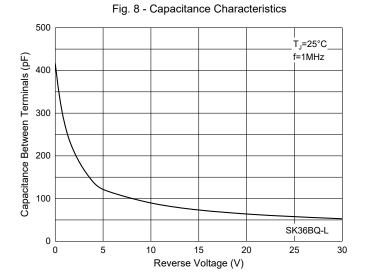
Fig. 6 - Typical Reverse Leakage Characteristics





Curve Characteristics

Fig. 7 - Capacitance Characteristics 500 T_J=25°C Capacitance Between Terminals (pF) f=1MHz 400 300 200 100 SK34BQ-L 0 5 25 10 15 20 30 Reverse Voltage (V)



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Ordering Information

Device	Packing
SK34BQ-LTP ~ SK36BQ-LTP	Tape&Reel:3Kpcs/Reel

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