SK34MAFG THRU SK320MAFG

Chip Integration Technology Corporation

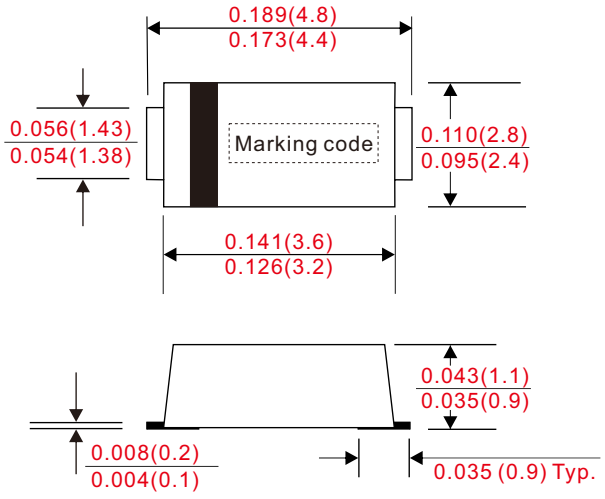
3A Surface Mount Schottky Barrier Rectifiers

■ Features

- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead free in compliance with EU RoHS.

■ Outline

SMAF



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SMAF
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.027 gram

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Average Rectified Output Current @ 90°C		I_O			3.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			70	A
Peak Reverse current @ 25°C	40V,60V	I_R			0.1	mA
	100V,150V,200V				0.05	
At Rated DC Blocking Voltage @ 100°C	40V,60V	I_R			10	mA
	100V,150V,200V				5	
Typical Junction capacitance		C_J		28		pF
Typical Thermal Resistance per leg		$R_{\theta JL}$		88		°C/W
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @3A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
SK34MAFG	40	28	40	0.55	-55 ~ +150
SK36MAFG	60	42	60	0.70	
SK310MAFG	100	70	100	0.85	
SK315MAFG	150	105	150	0.92	
SK320MAFG	200	140	200		

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Revision : C1

■ Rating and characteristic curves

Fig. 1 Forward Current Derating Curve

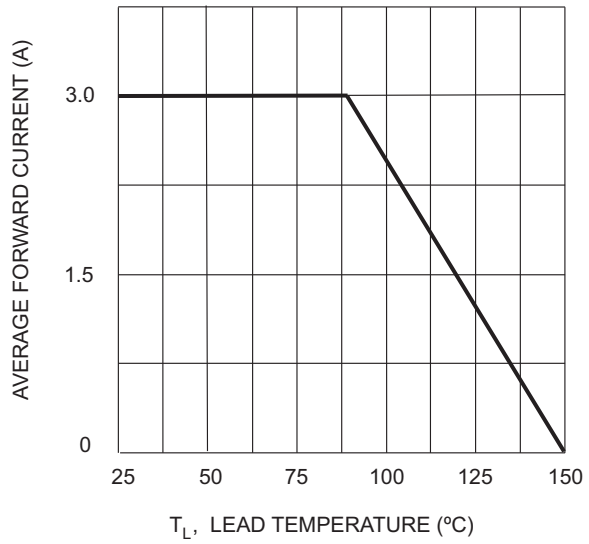


Fig. 2 Typ. Forward Characteristics

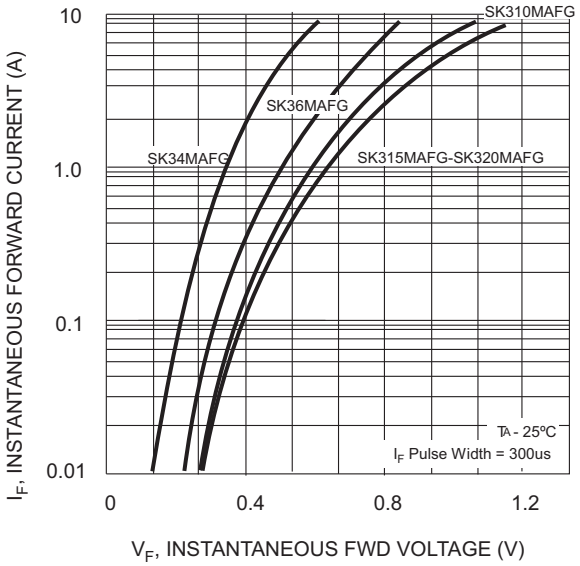


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

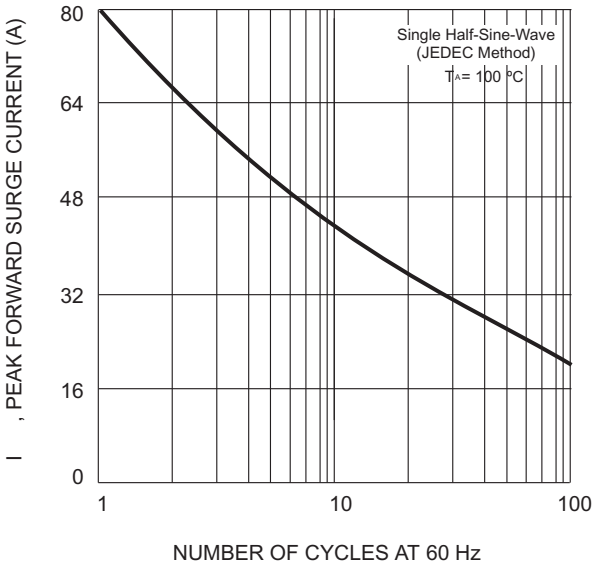
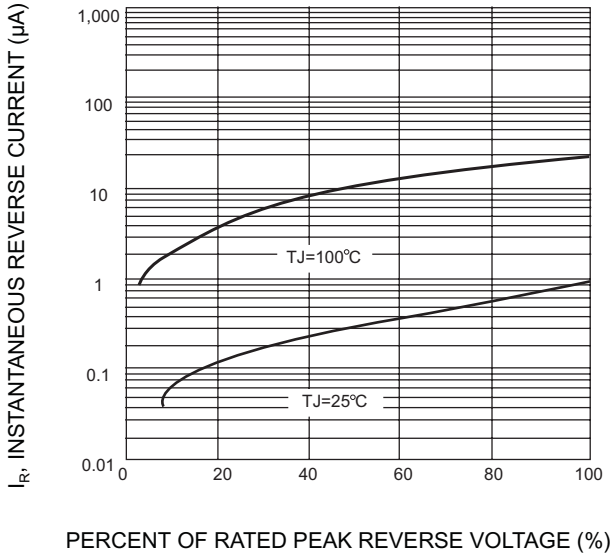


Fig. 4 T ypical Reverse Characteristics (per element)



Document ID : DS-22K018
Revised Date : 2016/12
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■ Marking Information

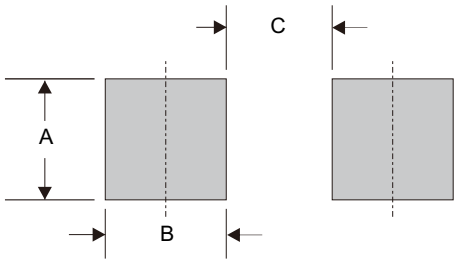
	Part number	Marking Code
Halogen free	SK34MAFG	S34
	SK36MAFG	S36
	SK310MAFG	S310
	SK315MAFG	S315
	SK320MAFG	S320

■ Ordering/Packing information

	Part number	Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen free	SK34MAFG	SMAF	10,000	20,000	160,000

Notes : 1. For packaging details please reference our website at http://www.citcorp.com.tw/tchinese/products/index.php

■ SMAF foot print



A	B	C
0.059 (1.50)	0.063 (1.60)	0.098 (2.50)

Dimensions in inches and (millimeters)

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