

Main Product Characteristics

$I_{F(AV)}$	1A
V_{RWM}	40V
T_J	100°C
$V_{F(Typ)}$	0.27V

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.
- Lead free in compliance with EU RoHS.

Mechanical data

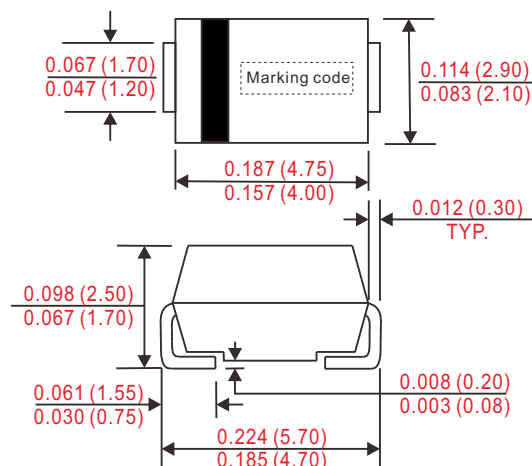
- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.002 ounce, 0.055 gram

Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Outline

SMA(DO-214AC)



Dimensions in inches and (millimeters)

Circuit Diagram



Parameter	Conditions	Symbol	SL14AG	UNIT
Working peak reverse voltage		V_{RWM}	40	V
Forward rectified current		I_O	1	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30	A
Peak repetitive reverse surge current	2us - 1kHz	I_{RRM}	1	A
Typical Thermal resistance	Junction to case	$R_{\theta JC}$	30	°C/W
	Junction to Ambient	$R_{\theta JA}$	120	°C/W
Storage temperature		T_{STG}	-55 ~ +150	°C
Operating Junction temperature		T_J	-55 ~ +100	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 1A, T_J = 25^\circ C$	V_F		340	400	mV
	$I_F = 1A, T_J = 100^\circ C$			270		
Reverse current	$V_R = 40V, T_J = 25^\circ C$	I_R		0.09	0.8	mA
	$V_R = 40V, T_J = 100^\circ C$			8	25	
Reverse Breakdown Voltage	$I_R = 1mA, T_J = 25^\circ C$	V_{BR}	40			V

■ Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics

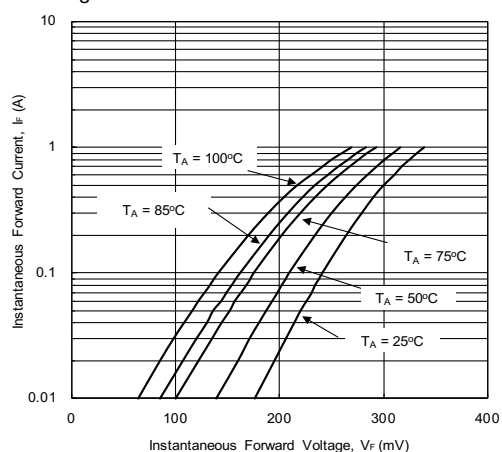


Fig. 2 - Reverse Characteristics

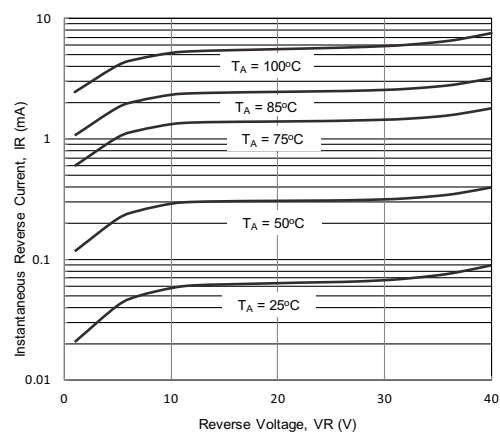


Fig. 3 - Forward Power Dissipation

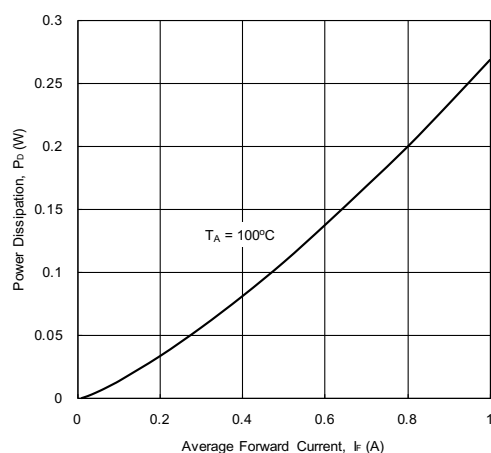


Fig. 4 - Forward Current Derating Curve

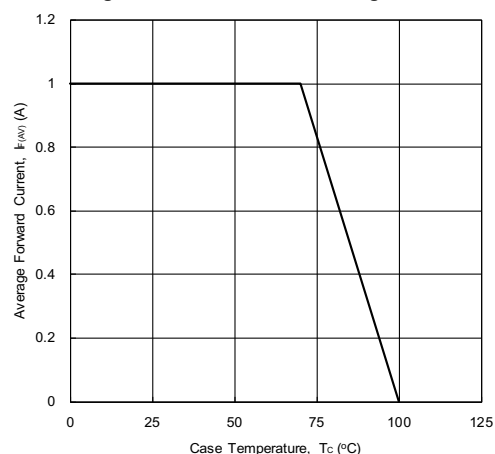
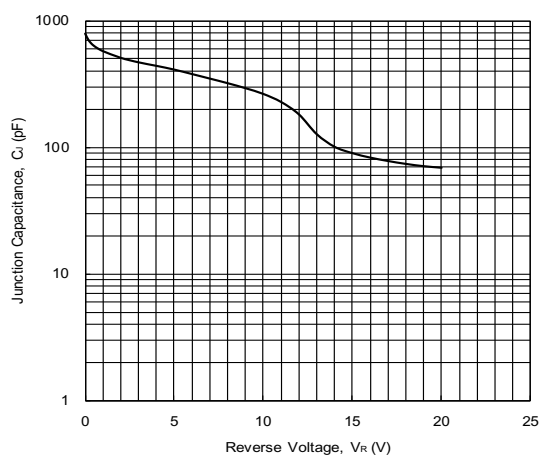
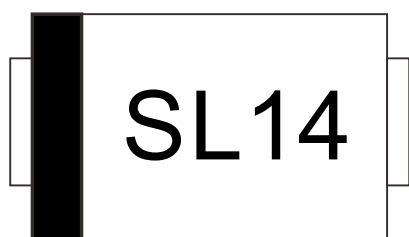


Fig. 5 - Junction Capacitance



■ Marking information



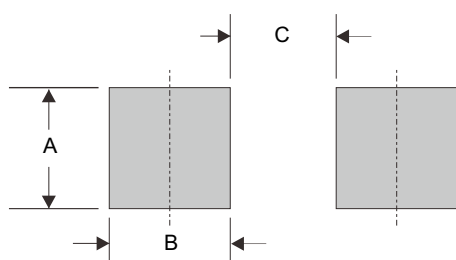
SL14 : Product type marking code

■ Ordering/Packing information

	Part number	Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen free	SL14AG	SMA	5,000	10,000	50,000

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

■ SMA foot print



A	B	C
0.068 (1.70)	0.104 (2.60)	0.060 (1.50)

Dimensions in inches and (millimeters)

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