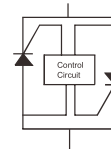


FEATURES

- | Fast switching
- | Automatically resets after power cycle
- | Available in low profile, small footprint DO-214AC(SMA)
- | Compatible with industrial lighting environments
- | Compatible with PWM frequencies up to 30 KHz
- | Meet AEC-Q101 Requirements



DO-214AC(SMA)



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$)

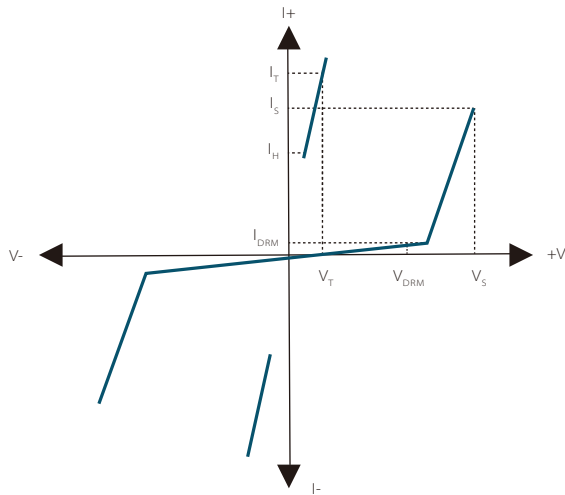
Part Number	Device Marking Code	Breakdown V_{BR}		Breakdown V_{DRM}	I_H	I_S	$I_T@V_T$	$V_T@I_T=1A$	Critical Rate Of Rise d_V/d_t
		Min.(V)	Max.(V)	Min.(V)	Min.(mA)	Max.(mA)	Max.(A)	Max.(V)	Max.(V/us)
PLED06TQ	PL6	6.0	16.0	6.0	5.0	100.0	1.0	1.2	250.0
PLED09TQ	PL9	9.0	18.0	9.0	5.0	100.0	1.0	1.2	250.0
PLED13TQ	PL13	13.0	26.0	13.0	5.0	100.0	1.0	1.2	250.0
PLED18TQ	PL18	18.0	33.0	18.0	5.0	100.0	1.0	1.2	250.0

THERMAL CONSIDERATIONS

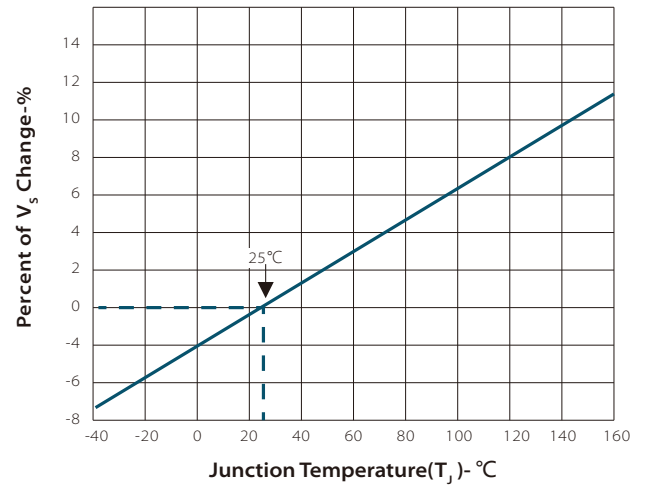
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	120	$^{\circ}\text{C}/\text{W}$
T_J	Operating Junction Temperature	-40 to +150	$^{\circ}\text{C}$
T_S	Storage Temperature Range	-40 to +150	$^{\circ}\text{C}$

TYPICAL DEVICE CHARACTERISTICS

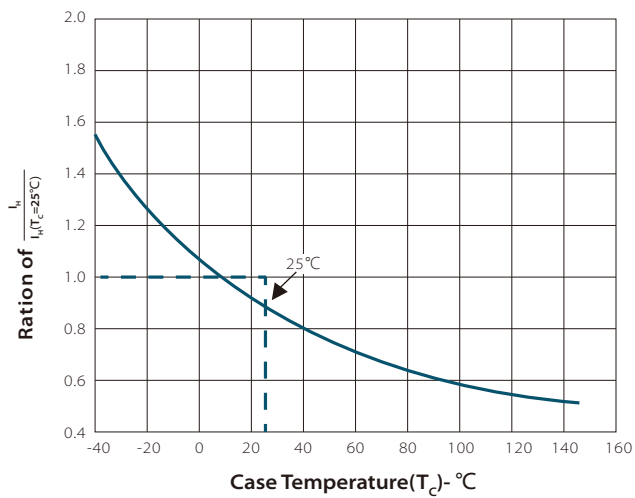
V-I Characteris



Normalized V_S Change vs. Junction Temperature

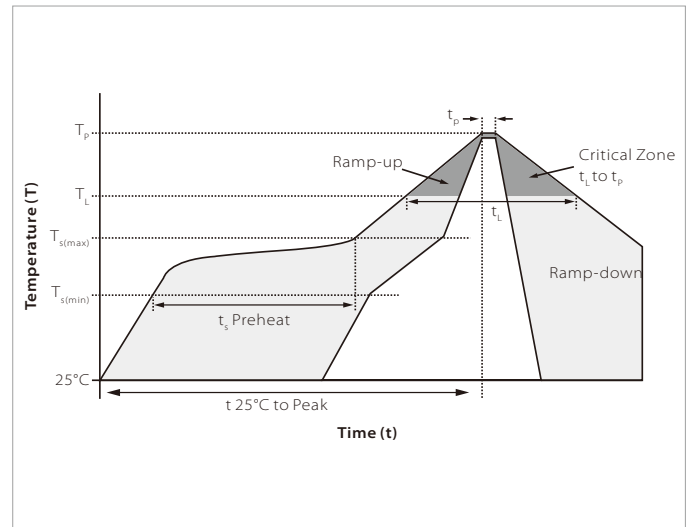


Normalized DC Holding Current vs. Case Temperature

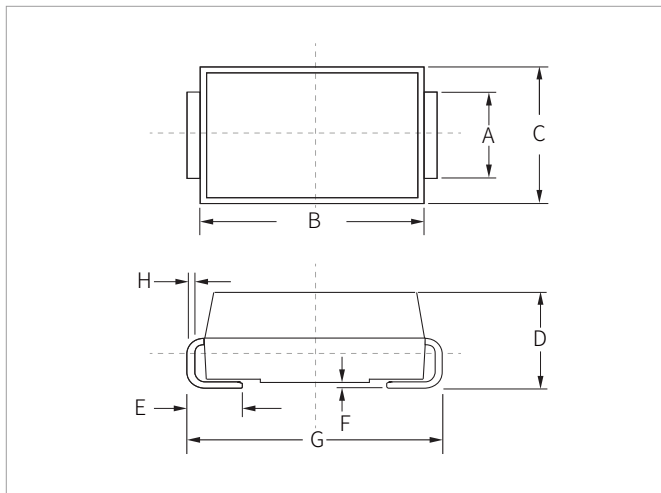


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_p)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

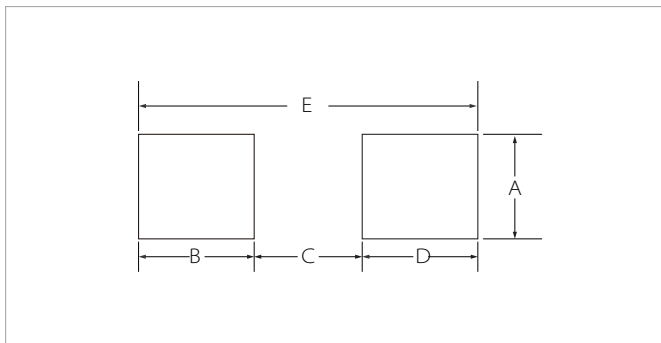


DO-214AC(SMA) PACKAGE INFORMATION



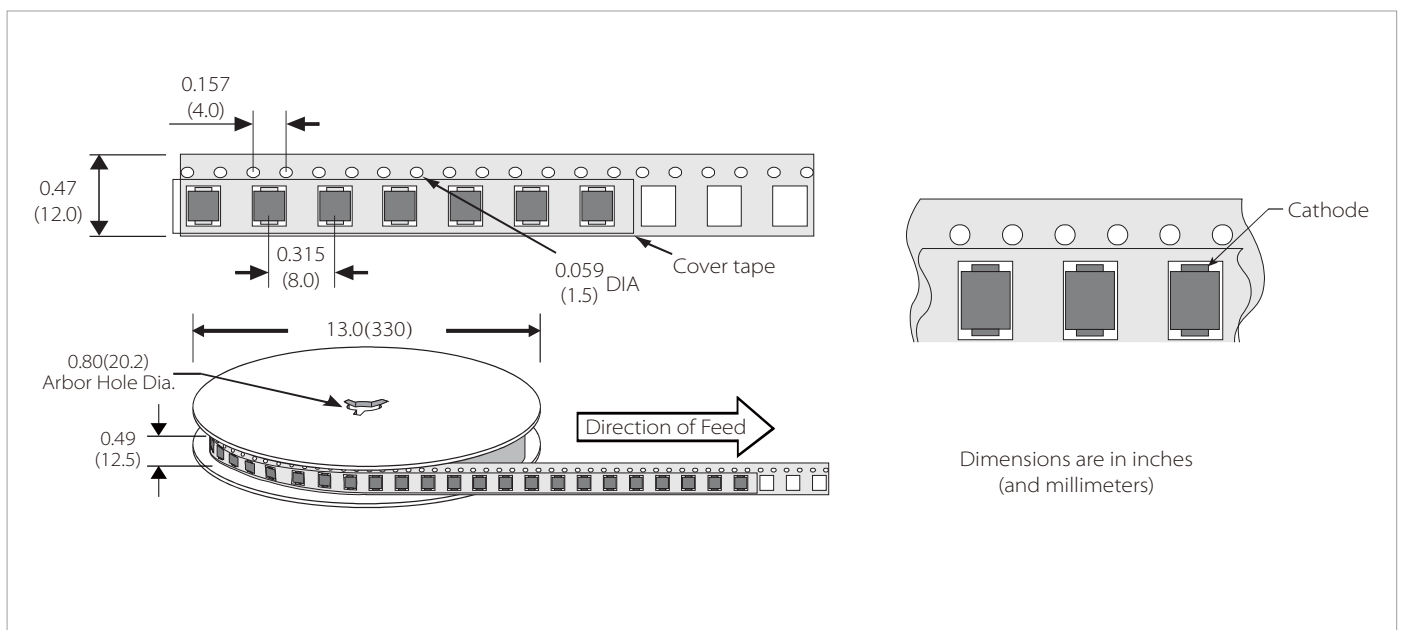
Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.20	1.60	0.047	0.063
B	4.20	4.60	0.165	0.181
C	2.40	2.80	0.094	0.110
D	2.00	2.40	0.079	0.094
E	0.76	1.52	0.030	0.060
F	0.02	0.20	0.001	0.008
G	4.85	5.25	0.191	0.207
H	0.15	0.30	0.006	0.012

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.63	-	0.064	-
B	1.45	-	0.057	-
C	-	2.80	-	0.090
D	1.45	-	0.057	-
E	5.28REF		0.208REF	

TAPE AND REEL SPECIFICATION



ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
PLED06TQ/09TQ/13TQ/18TQ	DO-214AC(SMA)	5000PCS	13"

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