

Features

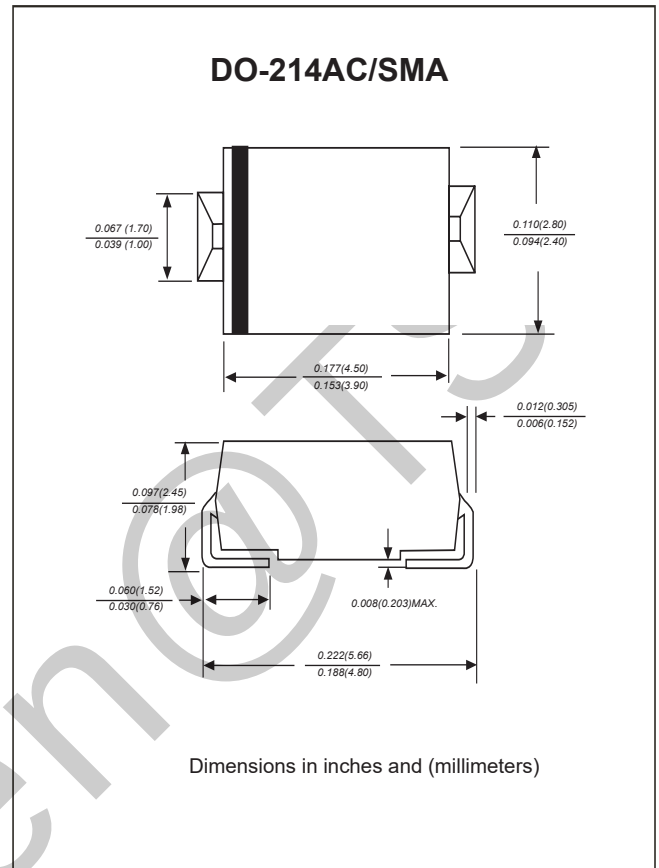
- Bi-directional crowbar transient voltage protection
- High surge capability
- High off-state impedance
- Low leakage current
- Low on-state voltage
- Short-circuit failure mode
- Ultra Low Capacitance

Mechanical Data

- Package: DO-214AC (SMA)
- Solder reflow max 265°C for 10 seconds
- Reel pack 5000PCS, EIA-481-D standard
- RoHS compliant

Applications

- Central office switching equipment (xDSL, T1/E1, ISDN)
- Customer Premises Equipment (phones, fax, modems, POS)
- Primary protection modules (MDF, building entrance)
- Access network equipment (NID)
- Data lines and security systems
- CATV line amplifiers and power inverters
- Sprinkler systems



Absolute Maximum Ratings (T_A=25°C, RH=45%-75%, unless otherwise noted)

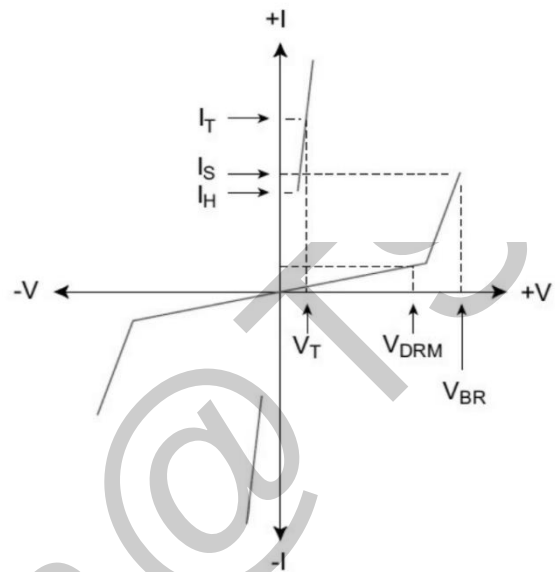
Parameter	Symbol	Value	Unit
Storage temperature range	T _{stg}	-40 to +150	°C
Operating junction temperature range	T _j	-40 to +150	°C

Electrical Characteristics (T_A=25°C)

Part Number	V _{RM}	I _{RM}	V _{BO}	I _{BO}	V _T	I _T	C _j	I _H
	Min.	Max.	Max.		Max.		Max.	Typ.
	V	uA	V	mA	V	A	pF	mA
P0640MA	58	3	77	800	4	2.2	60	120

Electrical Parameters & V-I Curve

Symbol	Parameter
V_{DRM}	Peak off-state voltage
I_{DRM}	Off-state current
V_{S}	Switching voltage
I_{S}	Switching current
V_{T}	On-state voltage
I_{T}	On-state current
I_{H}	Holding current
C_{O}	Off-state capacitance



Electrical Characteristics Curves

Figure1 tr x td Pulse Wave-form

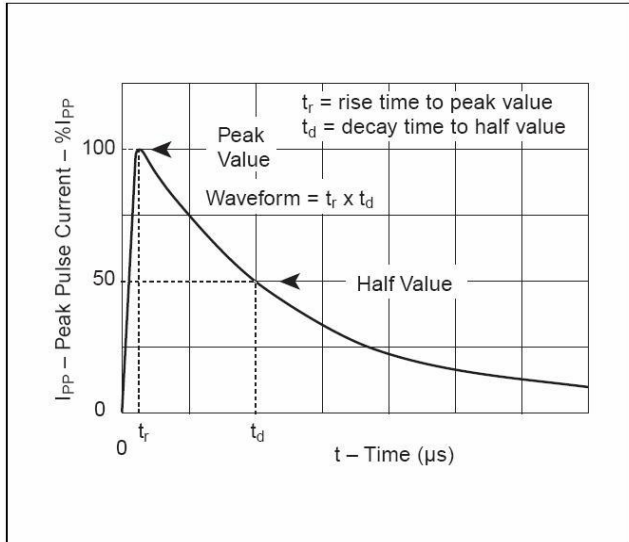


Figure 2 Normalized V_s Change versus Junction Temperature

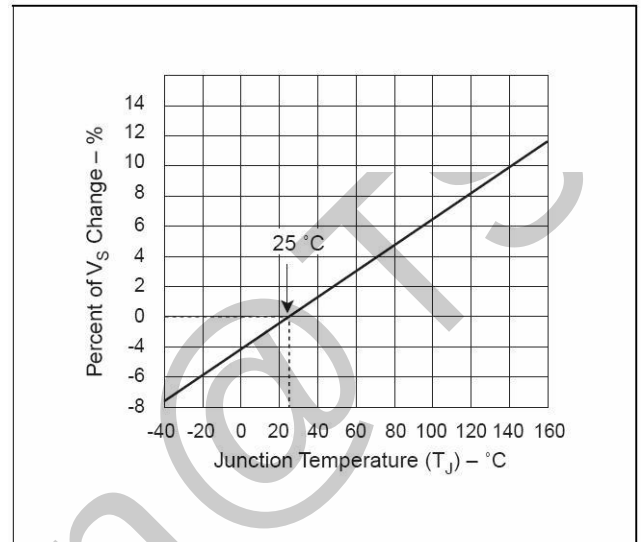
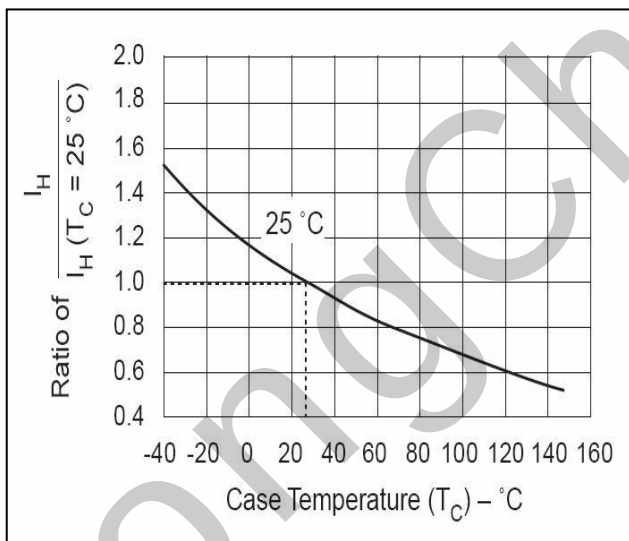
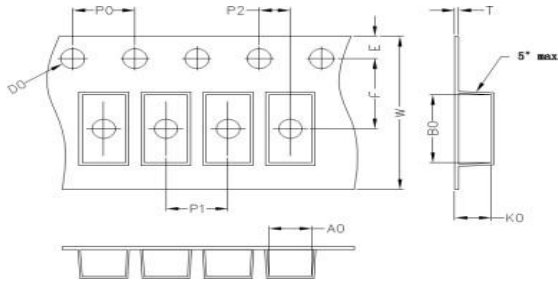


Figure 3 Normalized DC Holding Current

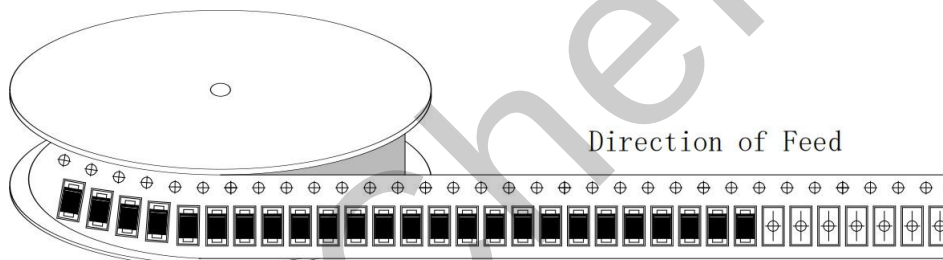
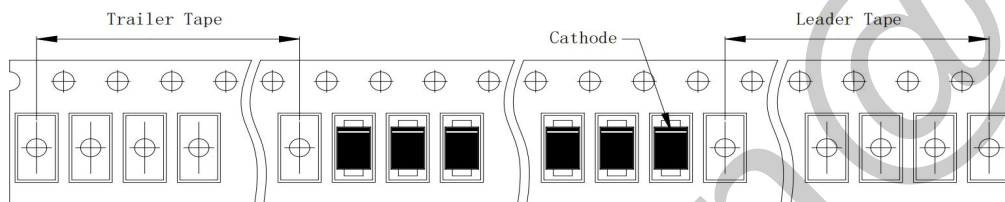


Package Information

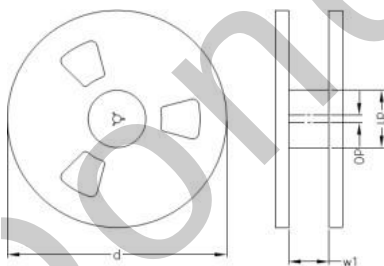
Carrier Dimension(mm)



A0	B0	K0	D0	E	F
2.79 ± 0.2	5.33 ± 0.2	2.36 ± 0.2	1.50 ± 0.1	1.75 ± 0.2	5.50 ± 0.2
P0	P1	P2	T	W	
4.0 ± 0.1	4.0 ± 0.1	2.0 ± 0.1	0.23 ± 0.05	12 ± 0.5	
Trailer Tape		50 Empty Pockets			
Leader Tape		100 Empty Pockets			



Reel Dimension(mm)



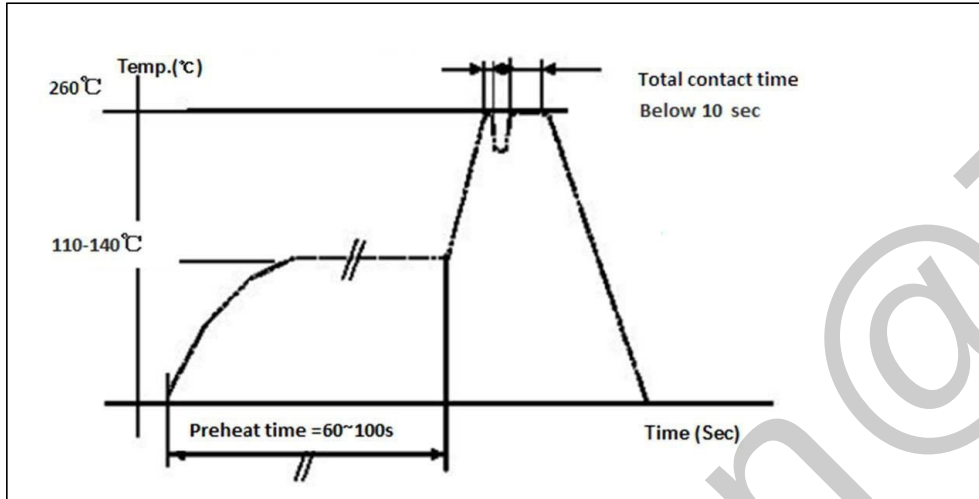
d	d0	d1	w1	t1
330 ± 2.0	13.5 ± 0.2	100 ± 0.5	13.5 ± 0.5	1.20 ± 0.2

Package Specifications

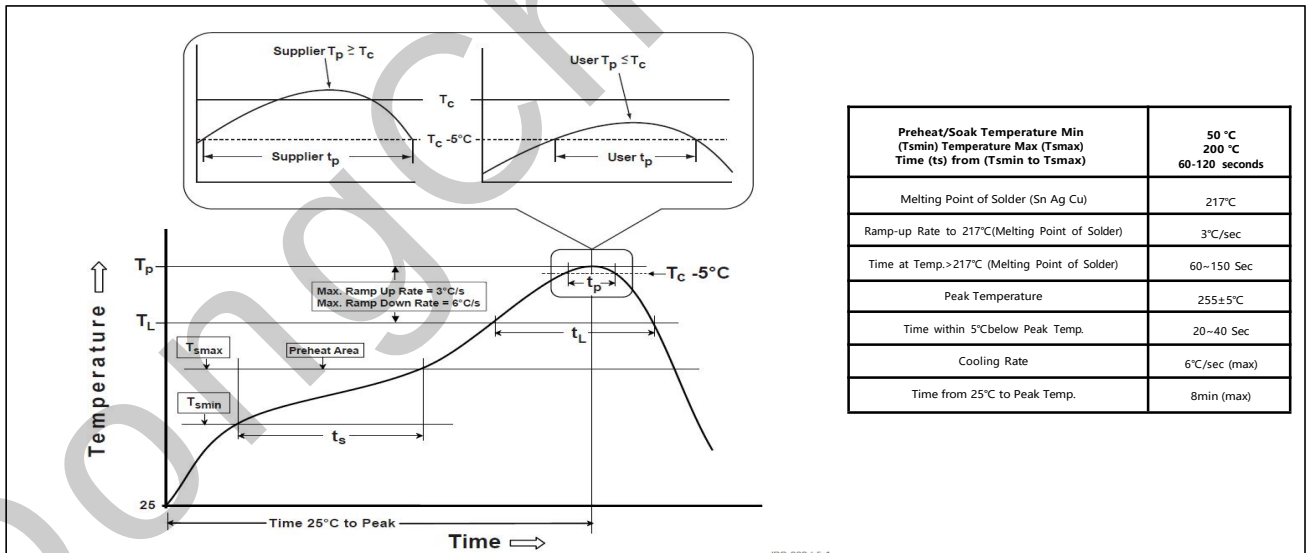
Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SMA	13'	330	7.5	340*340*40	15	435*370*365	150

Recommended Soldering Profile for Rectifier Diodes (Pb Free)

a) Wave Soldering Profile



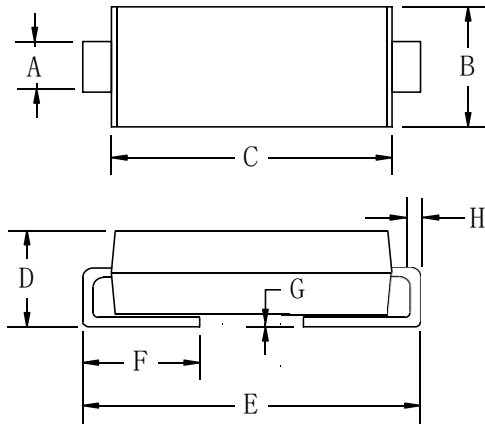
b) Reflow Soldering Profile (Pb Free Application), refer to IPC/JEDEC J-STD-020



c) Manual Soldering

When using an electric soldering iron for manual soldering, it is recommended that the temperature does not exceed 300°C and the soldering time is less than 10 seconds.

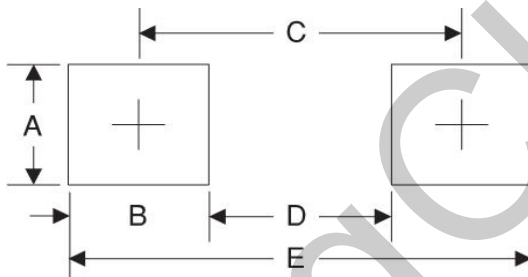
Package Mechanical Data

DO-214AC(SMA)


DO-214AC (SMA)		
Dim	Min	Max
A	1.30	1.70
B	2.40	2.80
C	3.90	4.50
D	2.00	2.50
E	4.80	5.30
F	0.76	1.53
G	0.00	0.203
H	0.152	0.305

Suggested Pad Layout

Dimensions in millimeters



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215

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