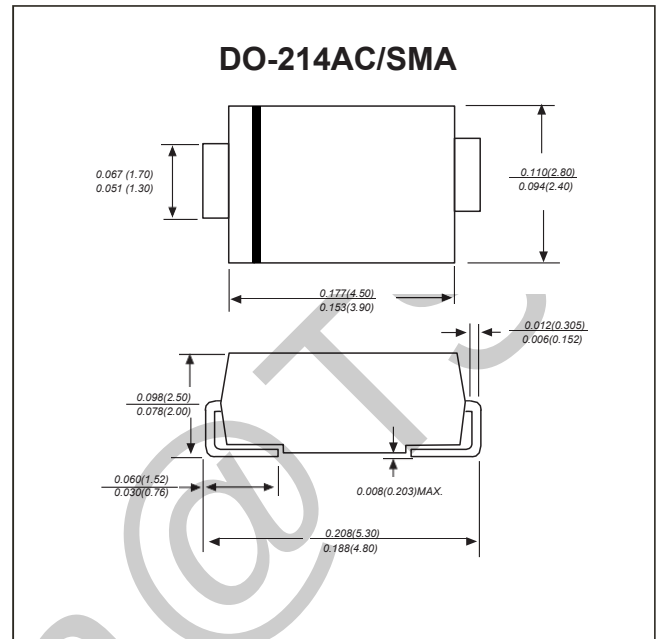


Features

- For surface mounted applications to optimize board space
- Low profile package
- Bidirectional crowbar protection
- Low leakage current: 5uA max
- Low on-state voltage
- Low capacitance
- Response time is < 1us
- ROHS compliant

Mechanical Data

- DO-214AC (SMA) surface mount package
- Tape & Reel packaging, 5,000pcs per reel
- Reel diameter 330mm
- 80,000pcs per carton



Applications

- Central office switching equipment
- Customer Premises Equipment (CPE)
- Primary protection modules
- Access network equipment
- Data lines and security systems
- CATV line amplifiers
- 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	150	°C
Repetitive peak pulse current	10/1000 us	I _{PP}	35	A
	5/310 us		50	
	8/20 us		125	
Non-repetitive peak pulse voltage	10/700 us	V _{PP}	2000	V
ESD Rating per IEC61000-4-2	Contact	V _{ESD}	30	KV
	Air		30	

Electrical Characteristics ($T_A=25^\circ\text{C}$)

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	μA	V	mA	V	A	pF	mA
P0080TA-MC	6.5	5	25	800	4	2.2	8	25

Notes:

- All measurements are made at an ambient temperature of 25°C . I_{PP} applies to -40°C through $+85^\circ\text{C}$ temperature range.
- Off-state capacitance (C_0) is measured at 1 MHz with a 2 V bias and is typical value.
- V_{BO} is measured at 100V/ μs rate rise Voltage

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{BO}	Switching Voltage
I_{BO}	Break over current
I_{RM}	Leakage current at V_{RM}
I_{PP}	Peak pulse current
I_H	Holding current
V_T	On-state Voltage at I_T
C_0	Off-state Capacitance

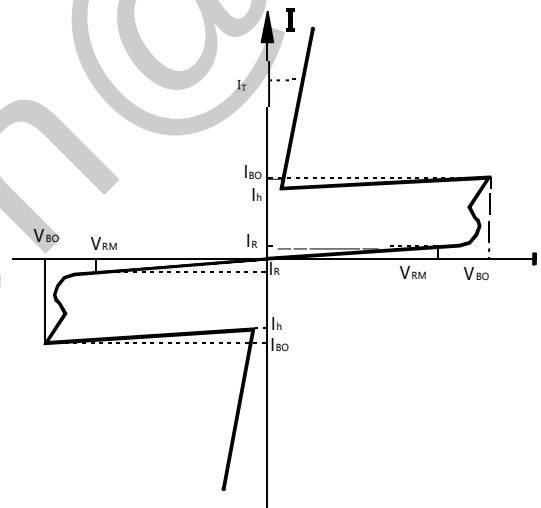
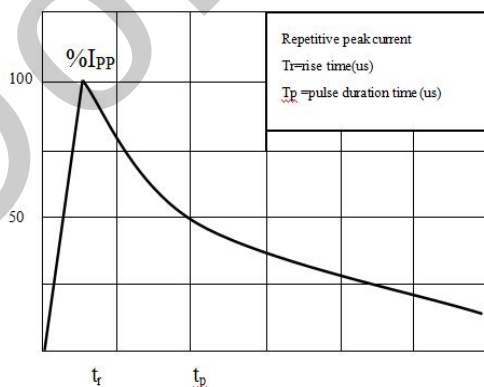

Typical electrical characteristic applications


Fig.1 Pulse Waveform (5/310us)

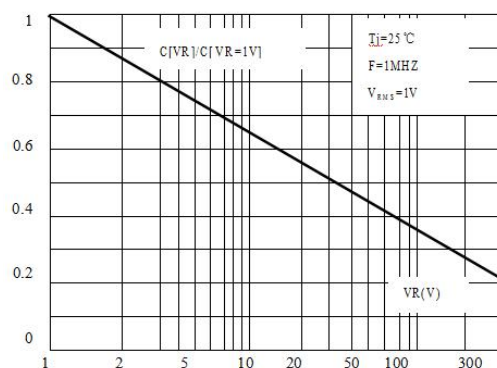
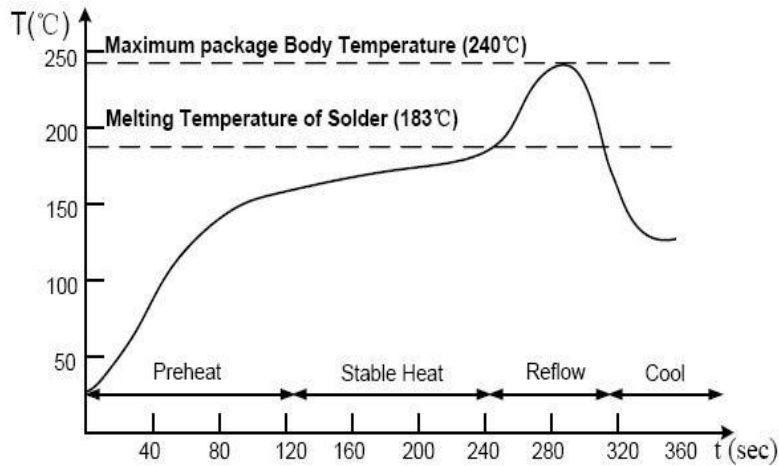


Fig. 2 Relation Variation of Junction Capacitance Versus Reverse Voltage Applied (Typical Values)

Suggested Soldering Temperature Profile

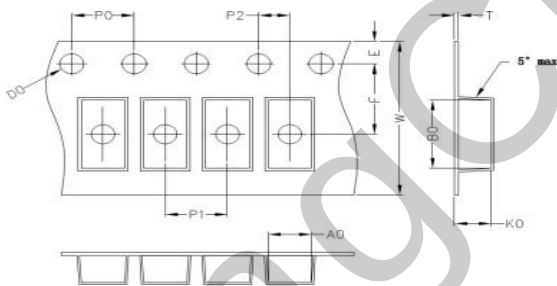


Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265 °C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

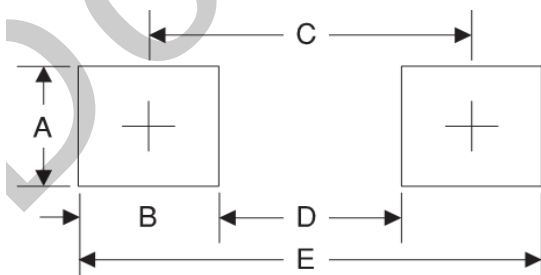
Package Information

Carrier Dimension(mm)



A0	B0	K0	D0	E	F
2.80	5.30	2.36	1.55	1.75	5.50
P0	P1	P2	T	W	Tolerance
4.0	4.0	2.0	0.25	12	0.1

Suggested Pad Layout



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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