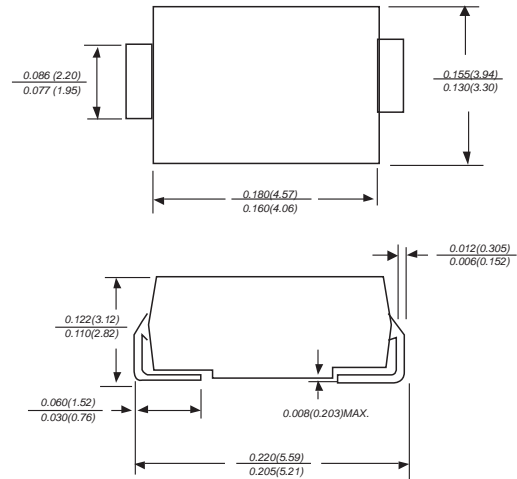


**FEATURES:**

- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Eliminates overvoltage caused by fast rising transients
- Moisture sensitivity level: Level 1
- Non degenerative

**DO-214AA/SMB**



Dimensions in inches and (millimeters)

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ , RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	$T_{stg}$	-60 to +150	$^\circ\text{C}$
Operating junction temperature range	$T_j$	-40 to +125	$^\circ\text{C}$
Repetitive peak pulse current	$I_{PP}$	200	A

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, continued)

Part Number	I <sub>DRM</sub> @V <sub>DRM</sub>		V <sub>S</sub> <sup>①</sup> @I <sub>S</sub>		V <sub>T</sub> @ I <sub>T</sub>		I <sub>H</sub>	C <sub>O</sub> <sup>②</sup>	Marking
	μA	V	V	mA	V	A	mA	pF	
	max		max	max	max	max	min	max	
P0080SD	5	6	25	800	4	2.2	50	150	P-8D
P0640SD	5	58	77	800	4	2.2	50	150	P06D
P0720SD	5	65	87	800	4	2.2	50	150	P07D
P0900SD	5	75	98	800	4	2.2	50	140	P09D
P1100SD	5	90	130	800	4	2.2	50	110	P11D
P1300SD	5	120	160	800	4	2.2	50	100	P13D
P1500SD	5	140	180	800	4	2.2	50	90	P15D
P1800SD	5	170	220	800	4	2.2	50	90	P18D
P2300SD	5	190	260	800	4	2.2	50	80	P23D
P2600SD	5	220	300	800	4	2.2	50	70	P26D
P3100SD	5	275	350	800	4	2.2	50	60	P31D
P3500SD	5	320	400	800	4	2.2	50	60	P35D
P3800SD	5	340	450	800	4	2.2	50	60	P38D

① V<sub>S</sub> is measured at 100KV/s

② Off-state capacitance is measured in V<sub>DC</sub>=2V, V<sub>RMS</sub>=1V, f=1MHz

### SOLDERING PARAMETERS

Reflow Condition		Pb-Free assembly (see FIG.2)
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	+150°C
	-Temperature Max( $T_{s(max)}$ )	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp ( $T_L$ ) to peak)		3°C/sec. Max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature( $T_L$ ) (Liquid us)	+217°C
	-Temperature( $t_L$ )	60-150 secs.
Peak Temp ( $T_p$ )		+260(+0/-5)°C
Time within 5°C of actual Peak Temp ( $t_p$ )		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp ( $T_P$ )		8 min. Max
Do not exceed		+260°C

FIG.1:  $t_r \times t_d$  pulse waveform

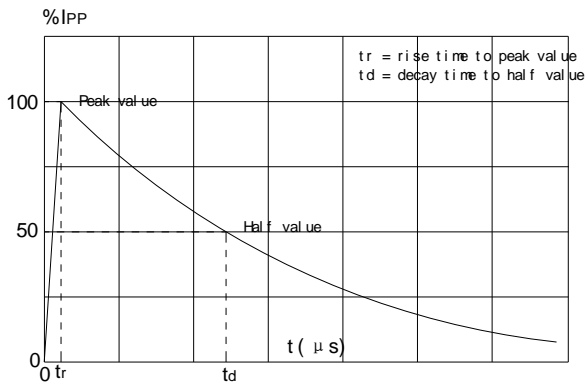


FIG. 3: Normalized  $V_s$  change vs. junction temperature

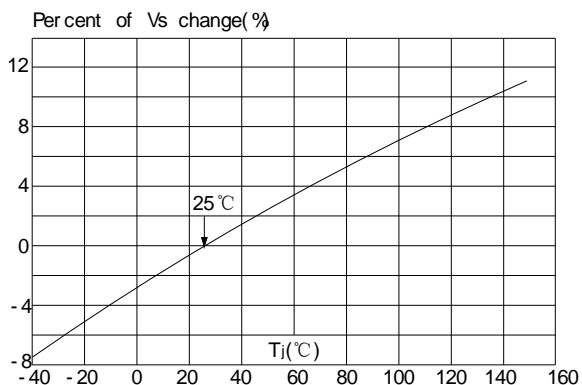


FIG.2: Reflow condition

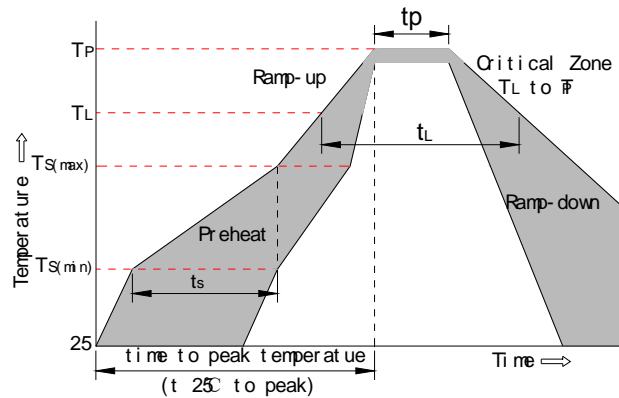


FIG. 4: Normalized DC holding current vs. case temperature

