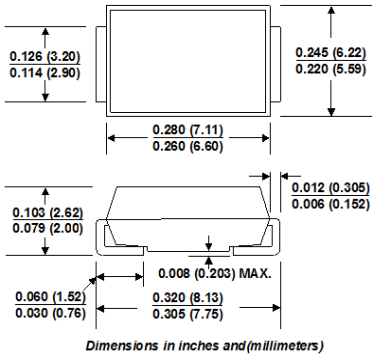
PSD1 SERIES

HIGH CURRENT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 30 TO 76 Volts

DO-214AB (SMC J-Bend)



Dimensions in inches and(millimeters)

FEATURES

◎ 1KA, 8/20 μs surge capability
◎ Low clamping voltage under surge
◎ Bidirectional TVS
◎ Surface mount DO-214AB package
◎ Halogen-Free
◎ RoHS compliant
◎ Typical maximum temperature coefficient △VBR=0.1%xVBR@25℃x△T
◎ Glass passivated junction
◎ Low inductance
◎ Plastic package has Underwriters Laboratory Flammability 94V-O
◎ High temperature soldering: 260°C/40 seconds at terminals
◎ Matte Tin Lead-free plated
◎ Meet MSL level 1, Per J-STD-020

MECHANICAL DATA

Case: JEDEC DO214AB. Molded plastic over glass passivated junction
Terminal: Solderable per MIL-STD-750, Method 2026
Standard Packaging: 16mm tape (EIA STD RS-481)
Weight: 0.0084~0.0086 ounce, 0.238091~0.243883 gram

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Current Rating per 8/20 μs IEC 61000-4-5 (Fig 1)	I_{PPM}	1000	Amps
Operating junction and Storage Temperature Range (Fig 2)	T_J , T_{STG}	-55 to +150	℃

Notes :

Non-repetitive current pulse , per Fig. 1 and derated above T_A = 25℃ per Fig. 2 .

PSD1 SERIES

HIGH CURRENT TRANSIENT VOLTAGE SUPPRESSOR
STAND-OFF VOLTAGE - 30 TO 76 Volts

PART NUMBER	DEVICE MARKING CODE	REVERSE STAND- OFF VOLTAGE V_{RWM}(V)	BREAKDOWN VOLTAGE V_{BR}(V) @I_T		TEST CURRENT IT (mA)	REVERSE LEAKAGE @ V_{RWM} I_R (μA)	PEAK PULSE CURRENT (1) @Ipp(A) (8/20μs per IEC 61000-4-5)	MAXIMUN CLAMPING VOLTAGE @ 8/20 μs
			MIN	MAX				
PSD1-030C	1K30C	30.0	33.30	36.80	1	1	1000	39.0
PSD1-033C	1K33C	33.0	36.70	40.60	1	1	1000	42.9
PSD1-036C	1K36C	36.0	40.00	44.20	1	1	1000	46.8
PSD1-040C	1K40C	40.0	44.40	49.10	1	1	1000	52.0
PSD1-043C	1K43C	43.0	47.80	52.80	1	1	1000	55.9
PSD1-045C	1K45C	45.0	50.00	55.30	1	1	1000	58.5
PSD1-048C	1K48C	48.0	53.30	58.90	1	1	1000	62.4
PSD1-051C	1K51C	51.0	56.70	62.70	1	1	1000	66.3
PSD1-054C	1K54C	54.0	60.00	66.30	1	1	1000	70.2
PSD1-058C	1K58C	58.0	64.40	71.20	1	1	1000	75.4
PSC1-060C	1K60C	60.0	66.70	73.70	1	1	1000	78.0
PSD1-064C	1K64C	64.0	71.10	78.60	1	1	1000	83.2
PSD1-066C	1K66C	66.0	72.00	80.00	1	1	1000	85.8
PSD1-070C	1K70C	70.0	77.80	86.00	1	1	1000	91.0
PSD1-076C	1K76C	76.0	85.00	95.00	1	1	1000	98.8

Note：

1. VC measured at the time coincident with the peak surge current

Ratings and Characteristic Curves(T_A=25℃ unless otherwise noted)

Fig.1 - 8/20 μs Waveform per IEC 61000-4-5

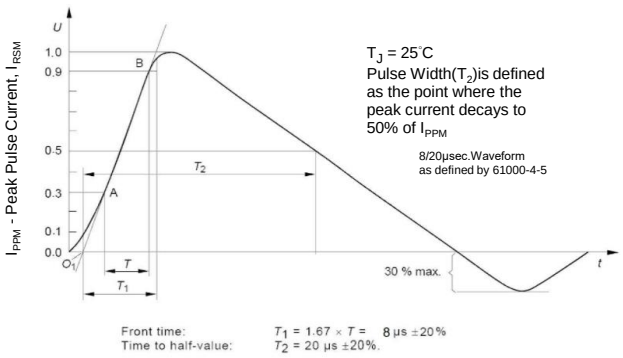
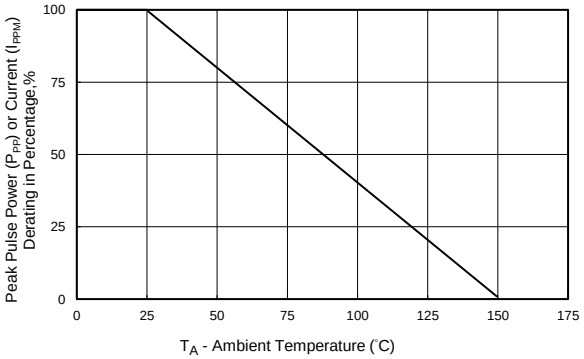


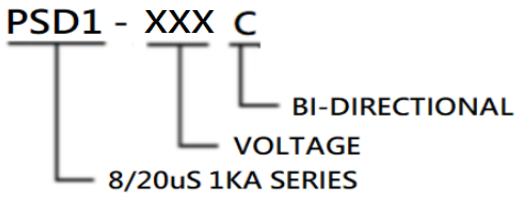
Fig.2 - Pulse Derating Curve



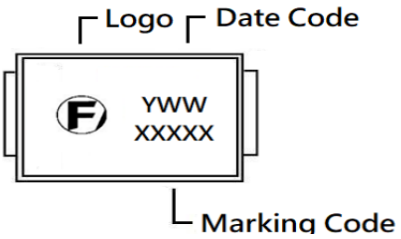
PSD1 SERIES

HIGH CURRENT TRANSIENT VOLTAGE SUPPRESSOR

Part Numbering System



Part Marking System



Packaging

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
PSD1-XXXCA	DO-214AB	3000	Tape & Reel - 16mm/13" tape	EIA STD RS-481
PSD1-XXXCA	DO-214AB	500	Tape & Reel - 16mm/ 7" tape	EIA STD RS-481