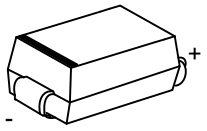
SMCJ

TVS

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSORS



SMC
(JEDEC DO-214AB)

■ DESCRIPTION

The UTC **SMCJ** is a surface mount transient voltage supperssors, it uses UTC's advanced technology to provide customers with low leakage and very fast response time, etc.

■ FEATURES

* Excellent clamping capability
* Low leakage
* Very fast response time

■ SYMBOL



SMCJXXXA SMCJXXXCA

■ ORDERING INFORMATION

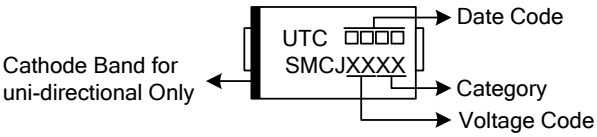
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SMCJXXAL-SMC-R	SMCJXXAG-SMC-R	SMC	K	A	Tape Reel
SMCJXXCAL-SMC-R	SMCJXXCAG-SMC-R	SMC	K	K	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

SMCJXXXL-SMC-R

(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) SMC: SMC
(3)Green Package	(3) L: Lead Free, G: Halogen Free and Lead Free
(4)Category	(4) A: 5% uni-directional, CA: 5% Bi-directional
(5)Output Voltage Code	(5) xxx: refer to ELECTRICAL CHARACTERISTICS

■ MARKING



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■ ABSOLUTE MAXIMUM RATING (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Power Dissipation with a 10/1000μs Waveform (Note 2)	P_{PP}	1500	W
Peak Pulse Current with a 10/1000μs Waveform (Note 2)	I_{PP}	See ELECTRICAL CHARACTERISTICS Table	A
Power Dissipation On Infinite Heatsink at T_L= 75°C	P_D	6.5	W
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Unidirectional Only (Note 3)	I_{FSM}	200	A
Maximum Instantaneous Forward Voltage at 50 A for Unidirectional Only (Note 4)	V_F	3.5/5.0	V
Operating Junction Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
2. Non-repetitive current pulse and derated above T_A=25°C
3. Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.
4. V_F<3.5V for devices of V_{BR}<200V and V_F<5.0V for devices of V_{BR}>201V.

PART NUMBER (Uni)	PART NUMBER (Bi)	BREAKDOWN VOLTAGE V_{BR} @ I_T			MAXIMUM REVERSE LEAKAGE I_R @ V_{RWM} (μA)	WORKING PEAK REVERSE VOLTAGE V_{RWM} (V)	MAXIMUM REVERSE SURGE CURRENT I_{PP} (A)	MAXIMUM CLAMPING VOLTAGE V_C @ I_{PP} (V)
		MIN (V)	MAX (V)	I_T (mA)				
SMCJ18A	SMCJ18CA	20.00	22.10	1	1	18	51.37	29.2
SMCJ24A	SMCJ24CA	26.70	29.50	1	1	24	38.56	38.9
SMCJ26A	SMCJ26CA	28.90	31.90	1	1	26	35.63	42.1
SMCJ28A	SMCJ28CA	31.10	34.40	1	1	28	33.04	45.4
SMCJ30A	SMCJ30CA	33.30	36.80	1	1	30	30.99	48.4
SMCJ33A	SMCJ33CA	36.70	40.60	1	1	33	28.14	53.3
SMCJ36A	SMCJ36CA	40.00	44.20	1	1	36	25.82	58.1
SMCJ58A	SMCJ58CA	64.40	71.20	1	1	58	16.03	93.6

■ TYPICAL CHARACTERISTICS (T_A=25°C, unless otherwise noted)

Fig 1. Pulse Derating Curve

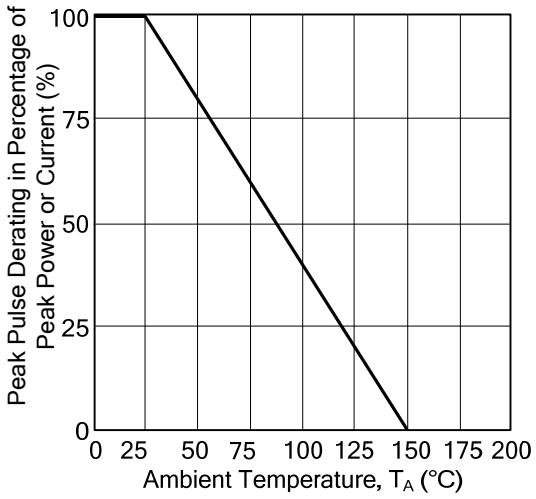


Fig 2. Maximum Non-Repetitive Surge Current

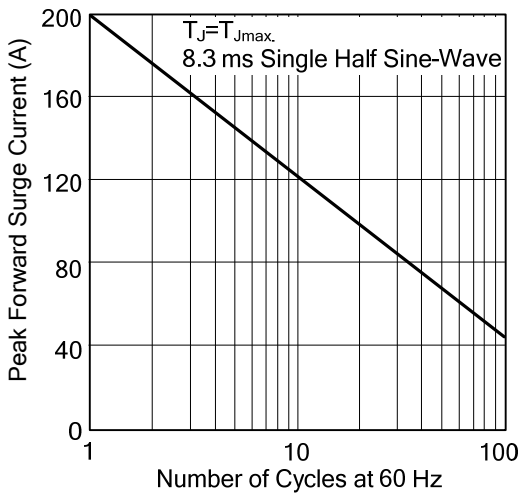


Fig 3. Steady State Power Derating Curve

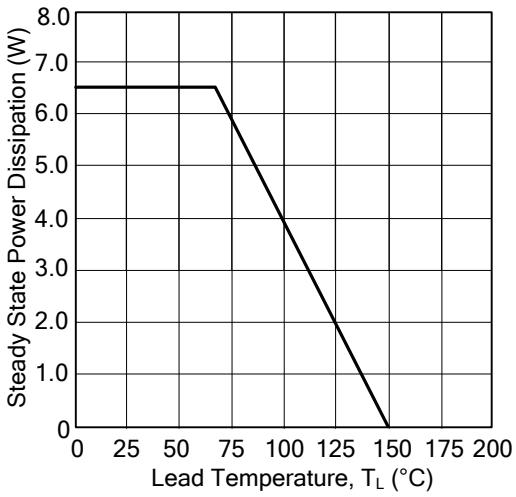


Fig 4. Peak Pulse Power Rating Curve

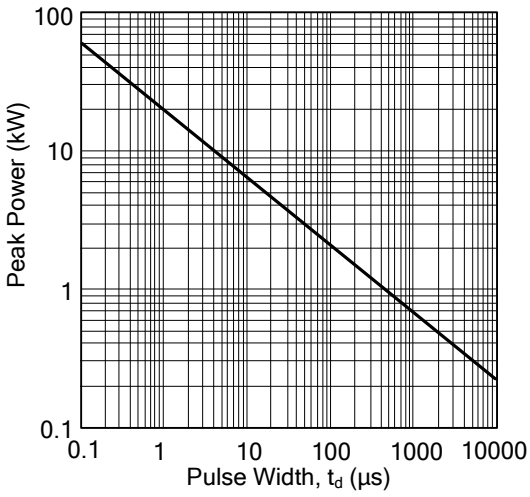
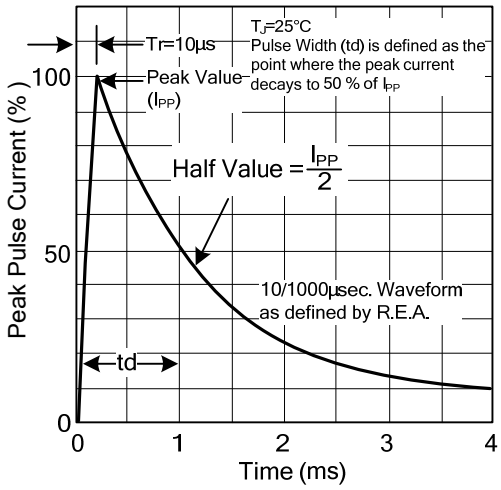


Fig 5. Pulse Waveform



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