

**Low Capacitance TVS Diode Array**

◆ **FEATURES**

- 1、 350 Watts Peak Pulse Power per Line (tp=8/20μs)
- 2、 Protects one I/O line (bidirectional)
- 3、 Low clamping voltage
- 4、 Working voltages: 3V, 5V, 8V, 12V, 15V, 24V
- 5、 Low leakage current

◆ **Applications**

- 1、 Cell Phone Handsets and Accessories
- 2、 Microprocessor based equipment
- 3、 Personal Digital Assistants (PDA's)
- 4、 Notebooks, Desktops, and Servers
- 5、 Portable Instrumentation
- 6、 Peripherals
- 7、 USB Interface

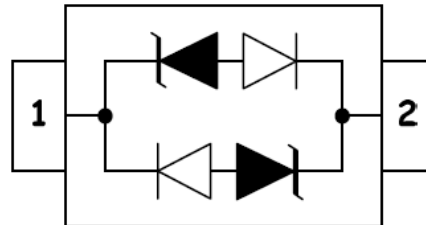
◆ **IEC COMPATIBILITY**

- 1、 IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- 2、 IEC61000-4-4 (EFT) 40A (5/50 η s)
- 3、 IEC61000-4-5 (Lightning) 12A (8/20 μ s)

◆ **SOD-323**



◆ **Pin Configuration**



◆ **MECHANICAL CHARACTERISTICS**

- 1、 JEDEC SOD-323 Package
- 2、 Molding Compound Flammability Rating : UL 94V-O
- 3、 Weight 5 Millgrams (Approximate)
- 4、 Quantity Per Reel : 3,000pcs
- 5、 Reel Size : 7 inch
- 6、 Lead Finish : Lead Free

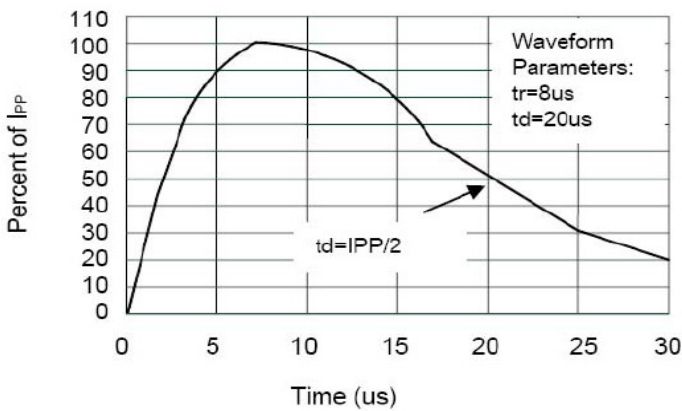
◆ **MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)**

Symbol	Parameter	Value	Units
P <sub>PP</sub>	Peak Pulse Power (tp=8/20μs waveform)	350	Watts
T <sub>L</sub>	Lead Soldering Temperature	260 (10 sec.)	°C
T <sub>J</sub>	Operating Temperature Range	-55 ~ 150	°C
T <sub>STG</sub>	Storage Temperature Range	-55 ~ 150	°C

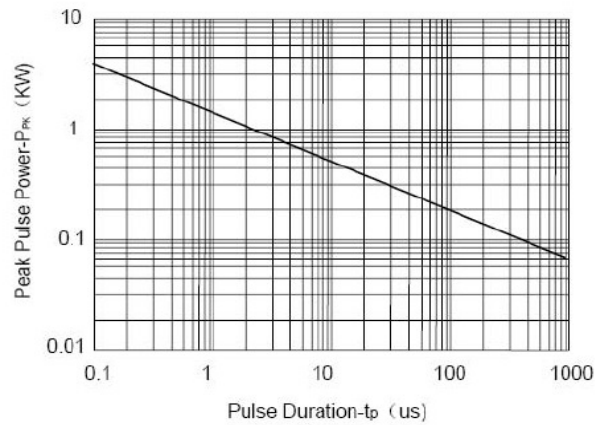
◆ **ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)**

PART NUMBER	$V_{RWM}$	$V_B$	$I_T$	$V_C$		$I_R$	$C_T$	
	(V) (max.)	(V) (min.)	(mA)	@1A(max.)	(max.) (@A)	( $\mu$ A) (max.)	(pF) (typ.)	
CMTLSD323CV03CR80AFE	3	4	1	5.15	13.9	8	20	0.8
CMTLSD323CV05CR80AFE	5	6	1	9.8	18.3	8	5	0.8
CMTLSD323CV08CR80AFE	8	8.5	1	13.4	18.5	8	2	0.8
CMTLSD323CV12CR80AFE	12	13.3	1	19	28.6	6	1	0.8
CMTLSD323CV15CR80AFE	15	16.7	1	24	31.8	5	1	0.8
CMTLSD323CV24CR80AFE	24	26.7	1	43	56	3	1	0.8

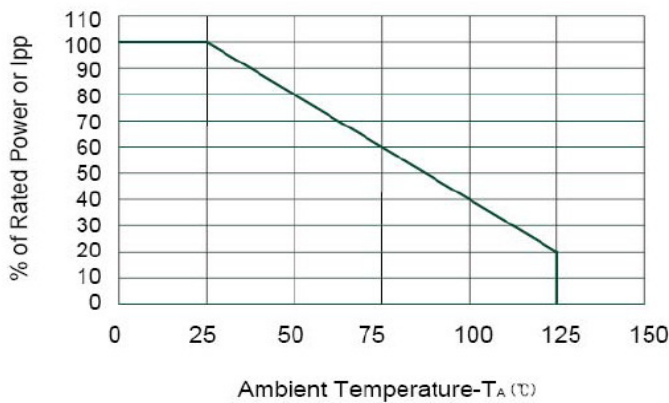
◆ **TYPICAL ELECTRICAL CHARACTERISTICS CURVE**



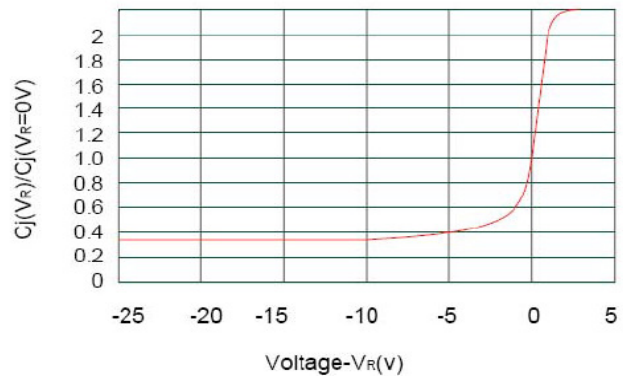
**Pulse Waveform**



**Non-Repetitive Peak Pulse Power vs. Pulse Time**



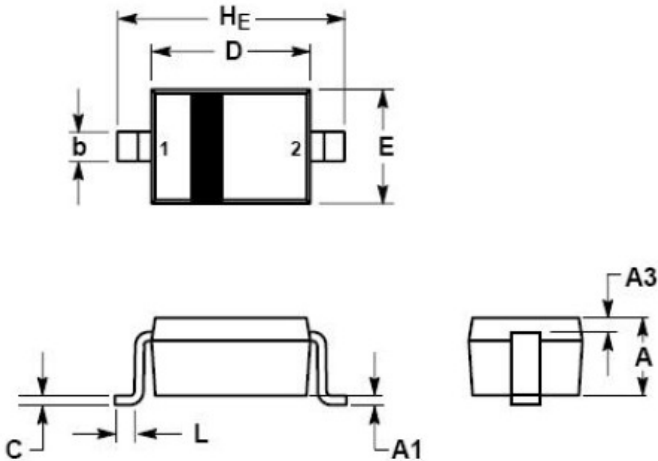
**Power Derating Curve**



**Junction Capacitance vs. Reverse Voltage**

◆ PACKAGE OUTLINE

**SOD-323**



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

◆ SOLDERING FOOTPRINT

