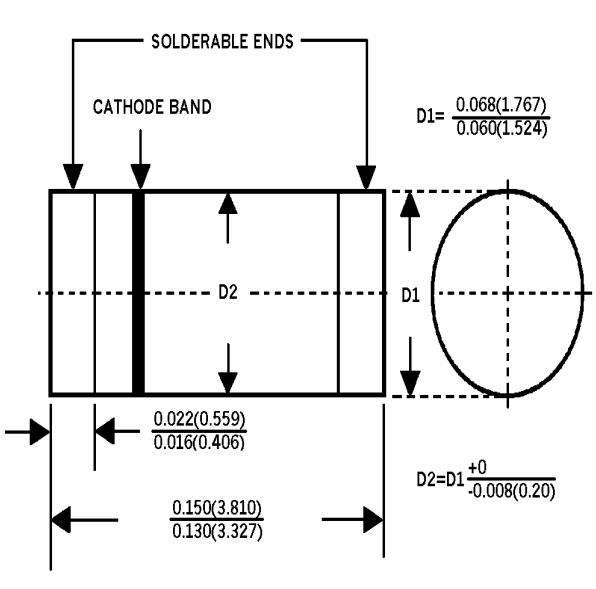
TGL34-6.8(A)(C)(CA)--TGL34-200(A)(C)(CA)

Surface Mount Unidirectional and Bidirectional TVS

特徵 FEATURES

- 塑膠封裝。Plastic MINI MELF package.
- 玻鈍晶片。Glass passivated chip junction.
- 峰值脈沖功率能力是 150 瓦，當脈沖方形波寬度是 10/1000μs，重復率(占空系數)是 0.01%。
  150W peak pulse power capability with a 10/1000μs waveform ,repetition rate(duty cycle): 0.01%.
- 極好的鉗位能力。 Excellent clamping capability.
- 快速響應時間。 Very fast response time.
- 逐漸低下的浪涌阻抗。 Low incremental surge resistance.
- 反向漏電典型值低于 1mA,高于 10V 的額定鉗位電壓
  Typical ID less than 1mA above 10V rating
- 高溫焊接保証 High temperature soldering guaranteed:
  250℃/10 seconds of terminal

DO-213AA/MINI MELF



尺寸單位：inch(mm)

Dimension in inches (millimeters)

機械資料 MECHANICAL DATA

- 封 裝: DO-213AA(GL34) Case:DO-213AA(GL34)
- 端 子: 不光滑的鍍錫引線，可焊性按照 MIL-STD-202 標准，方法 208(E3)
  Terminals: Matte tin plated leads,solderable per MIL-STD-202 method 208 E3 suffix for commercial grade.
- 極 性: 單極性類型的色環端表示陰極。
  Polarity: For unidirectional types the band denotes the cathode which is positive with respect to the anode under normal TVS operation.

雙極性類型尾標中綴“C”或者“CA”，電子特性應用于雙向。

For bidirectional types (add suffix “C”or ”CA”),electrical characteristics apply in both directions.

極限值和溫度特性 TA=25℃ 除非另有規定。
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ Ambient temp. Unless otherwise specified.

參數 Parameter	符號 SYMBOL	數值 Value	單位 UNITS
峰值脈沖功率消耗 (Fig.1) Peak pulse power dissipation(10/1000μs waveform)	Pppm	150	W
最大瞬間正向電壓 IF = 10A (Fig.3) Maximum Instantaneous Forward Voltage	VF	< 3.5	V
典型熱阻(接面環繞) (Fig.2) Typical Thermal Resistance Junction-to-Ambient	$R\theta J_A$	75	℃/W
典型熱阻(接面引線) Typical Thermal Resistance Junction-to-lead	$R\theta J_L$	15	℃/W
峰值正向浪湧電流 8.3ms 單一正弦半波 (Fig.3) Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	20	A
工作結溫和存儲溫度 Operating Junction And Storage Temperature Range	Tj, TSTG	-55+150	℃

Notes:1.Non-repetitive pulse curve Ippm=f(t)

2.Mounted on P.C board with 25 mm^2 copper pads at each terminal

3.Unidirectional diodes ony

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型號 Type	轉折電壓 Breakdown Voltage		測試電流 Test Current	反向峰值電壓 Stand-off voltage	最大反向漏电流 Maximum Reverse Leakage	最大鉗位電壓 Maximum Clamping Voltage	最大峰值脈衝電流 Maximum Peak Pulse Current
	V_{BR} (V)		I_T (mA)	V_{WM} (V)	I_D (μA)	V_C (V)	I_{PPM} (A)
TGL34-6.8(C)	6.8±10%	6.12…7.48	1.0	5.5	1000	10.8	13.9
TGL34-6.8A(CA)	6.8±5%	6.45…7.14	1.0	5.8	1000	10.5	14.3
TGL34-7.5(C)	7.5±10%	6.75…8.25	1.0	6.0	500	11.7	12.8
TGL41-7.5A(CA)	7.5±5%	7.13…7.88	1.0	6.4	500	11.3	13.3
TGL34-8.2(C)	8.2±10%	7.38…9.02	1.0	6.6	200	12.5	12.0
TGL34-8.2A(CA)	8.2±5%	7.79…8.61	1.0	7.0	200	12.1	12.4
TGL34-9.1(C)	9.1±10%	8.19…10.0	1.0	7.3	50	13.8	10.9
TGL34-9.1A(CA)	9.1±5%	8.65…9.55	1.0	7.7	50	13.4	11.2
TGL34-10(C)	10±10%	9.0…11.0	1.0	8.1	10	15.0	10.0
TGL34-10A(CA)	10±5%	9.5…10.5	1.0	8.5	10	14.5	10.3
TGL34-11(C)	11±10%	9.9…12.1	1.0	8.9	5	16.2	9.3
TGL34-11A(CA)	11±5%	10.5…11.6	1.0	9.4	5	15.6	9.6
TGL34-12(C)	12±10%	10.8…13.2	1.0	9.7	5	17.3	8.7
TGL34-12A(CA)	12±5%	11.4…12.6	1.0	10.2	5	16.7	9.0
TGL34-13(C)	13±10%	11.7…14.3	1.0	10.5	5	19.0	7.9
TGL34-13A(CA)	13±5%	12.4…13.7	1.0	11.1	5	18.2	8.2
TGL34-15(C)	15±10%	13.5…16.5	1.0	12.1	5	22.0	6.8
TGL34-15A(CA)	15±5%	14.3…15.8	1.0	12.8	5	21.2	7.1
TGL34-16(C)	16±10%	14.4…17.6	1.0	12.9	5	23.5	6.4
TGL34-16A(CA)	16±5%	15.2…16.8	1.0	13.6	5	22.5	6.7
TGL34-18(C)	18±10%	16.2…19.8	1.0	14.5	5	26.5	5.7
TGL34-18A(CA)	18±5%	17.1…18.9	1.0	15.3	5	25.2	6.0
TGL34-20(C)	20±10%	18.0…22.0	1.0	16.2	5	29.1	5.2
TGL34-20A(CA)	20±5%	19.0…21.0	1.0	17.1	5	27.7	5.4
TGL34-22(C)	22±10%	19.8…24.2	1.0	17.8	5	31.9	4.7
TGL34-22A(CA)	22±5%	20.9…23.1	1.0	18.8	5	30.6	4.9
TGL34-24(C)	24±10%	21.6…26.4	1.0	19.4	5	34.7	4.3
TGL34-24A(CA)	24±5%	22.8…25.2	1.0	20.5	5	33.2	4.5
TGL34-27(C)	27±10%	24.3…29.7	1.0	21.8	5	39.1	3.8
TGL34-27A(CA)	27±5%	25.7…28.4	1.0	23.1	5	37.5	4.0
TGL34-30(C)	30±10%	27.0…30.0	1.0	24.3	5	43.5	3.4
TGL34-30A(CA)	30±5%	28.5…31.5	1.0	25.6	5	41.4	3.6
TGL34-33(C)	33±10%	29.7…36.3	1.0	26.8	5	47.7	3.1
TGL34-33A(CA)	33±5%	31.4…34.7	1.0	28.2	5	45.7	3.3
TGL34-36(C)	36±10%	32.4…39.6	1.0	29.1	5	52.0	2.9
TGL34-36A(CA)	36±5%	34.2…37.8	1.0	30.8	5	49.0	3.0
TGL34-39(C)	39±10%	35.1…42.9	1.0	31.6	5	56.4	2.7
TGL34-39A(CA)	39±5%	37.1…41.0	1.0	33.3	5	53.9	2.8

TGL34-6.8(A)(C)(CA)--TGL34-200(A)(C)(CA)

Surface Mount Unidirectional and Bidirectional TVS

型號 Type	轉折電壓 Breakdown Voltage		測試電流 Test Current	反向峰值電壓 Stand-off voltage	最大反向漏电流 Maximum Reverse Leakage	最大鉗位電壓 Maximum Clamping Voltage	最大峰值脈衝電流 Maximum Peak Pulse Current
	V_{BR} (V)		I_T (mA)	V_{WM} (V)	I_D (μA)	V_C (V)	I_{PPM} (A)
TGL34-43(C)	43±10%	38.7…47.3	1.0	34.8	5	61.9	2.4
TGL34-43A(CA)	43±5%	40.9…45.2	1.0	36.8	5	59.3	2.5
TGL34-47(C)	47±10%	42.3…51.7	1.0	38.1	5	67.8	2.2
TGL34-47A(CA)	47±5%	44.7…49.4	1.0	40.2	5	64.8	2.3
TGL34-51(C)	51±10%	45.9…56.1	1.0	41.3	5	73.5	2.0
TGL34-51A(CA)	51±5%	48.5…53.6	1.0	43.6	5	70.1	2.1
TGL34-56(C)	56±10%	50.4…61.6	1.0	45.4	5	81	1.9
TGL34-56A(CA)	56±5%	53.2…58.8	1.0	47.8	5	77	1.9
TGL34- 62(C)	62±10%	55.8…68.8	1.0	50.2	5	89	1.7
TGL34-62A(CA)	62±5%	58.9…65.1	1.0	53.0	5	85	1.8
TGL34- 68(C)	68±10%	61.2…74.8	1.0	55.1	5	98	1.5
TGL34-68A(CA)	68±5%	64.6…71.4	1.0	58.1	5	92	1.6
TGL34- 75(C)	75±10%	67.5…82.5	1.0	60.7	5	108	1.4
TGL34-75A(CA)	75±5%	71.3…78.8	1.0	64.1	5	103	1.5
TGL34- 82(C)	82±10%	73.8…90.2	1.0	66.4	5	118	1.3
TGL34-82A(CA)	82±5%	77.9…86.1	1.0	70.1	5	113	1.3
TGL34- 91(C)	91±10%	81.9…100	1.0	73.7	5	131	1.1
TGL34-91A(CA)	91±5%	86.5…95.5	1.0	77.8	5	125	1.2
TGL34- 100(C)	100±10%	90.0…110	1.0	81.0	5	144	1.0
TGL34-100A(CA)	100±5%	95.0…105	1.0	85.5	5	137	1.1
TGL34- 110(C)	110±10%	99.0…121	1.0	89.2	5	158	0.9
TGL34-110A(CA)	110±5%	105…116	1.0	94.0	5	152	1.0
TGL34-120C)	120±10%	108…132	1.0	97.2	5	173	0.9
TGL34-120A(CA)	120±5%	114…126	1.0	102	5	165	0.9
TGL34- 130(C)	130±10%	117…143	1.0	105	5	187	0.8
TGL34-130A(CA)	130±5%	124…137	1.0	111	5	179	0.8
TGL34- 150(C)	150±10%	135…165	1.0	121	5	215	0.7
TGL34-150A(CA)	150±5%	143…158	1.0	128	5	207	0.7
TGL34- 160(C)	160±10%	144…176	1.0	130	5	230	0.7
TGL34-160A(CA)	160±5%	152…168	1.0	136	5	219	0.7
TGL34- 170(C)	170±10%	153…187	1.0	138	5	244	0.6
TGL34-170A(CA)	170±5%	162…179	1.0	145	5	234	0.6
TGL34- 180(C)	180±10%	162…198	1.0	146	5	258	0.6
TGL34-180A(CA)	180±5%	171…189	1.0	154	5	246	0.6
TGL34- 200(C)	200±10%	180…220	1.0	162	5	287	0.5
TGL34-200A(CA)	200±5%	190…210	1.0	171	5	274	0.5

雙極性類型尾標中綴“C“或者“CA”，電子特性應用于雙向。

For bidirectional types (add suffix “C”or ”CA”),electrical characteristics apply in both directions.

FIG. 1–峰值脈沖功率定額曲線
FIG. 1 – NON-REPETITIVE PULSE RATING CURVE

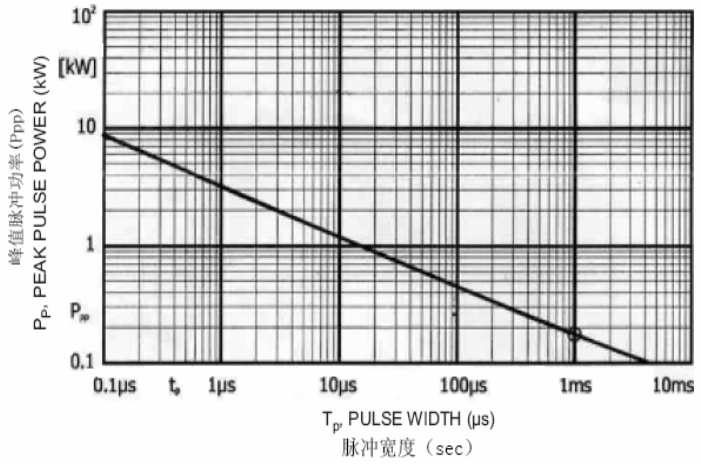

FIG. 2 –脈沖降額曲線
FIG. 2 – PULSE CURVE DERATING

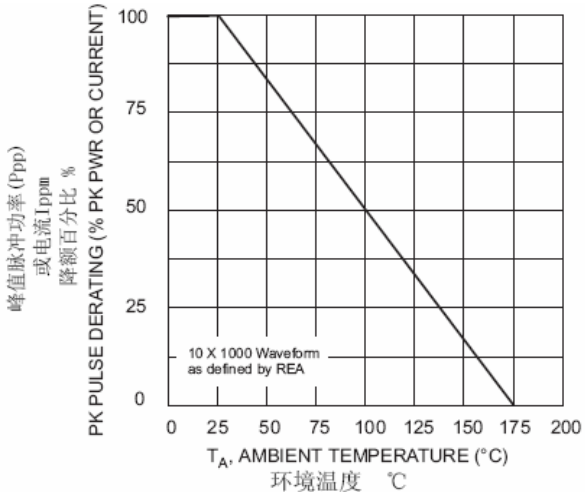

FIG. 3 –脈沖波形
FIG. 3 – PULSE WAVEFORM

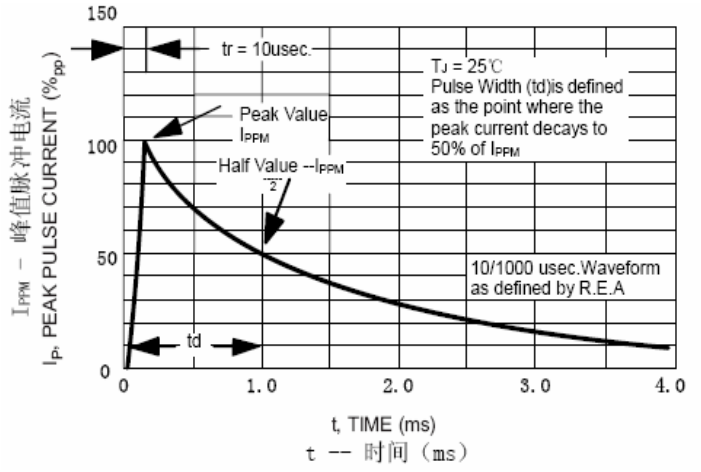

FIG. 4 –反向特性曲線(典型值)
FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

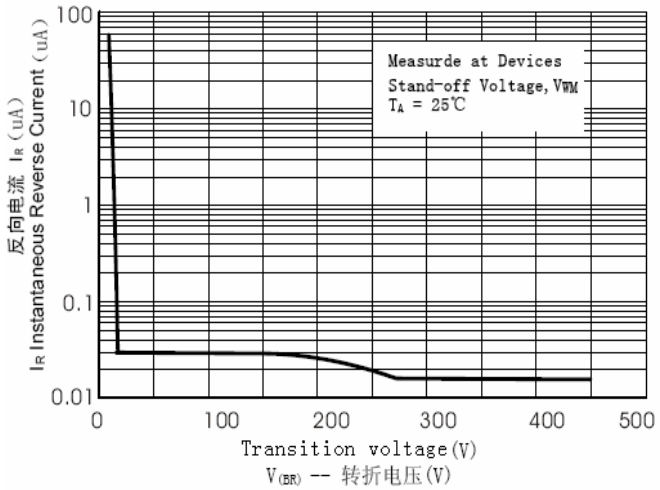

FIG. 5 – 典型瞬態熱阻
FIG. 5 –TYPICAL TRANSIENT THERMAL IMPEDANCE

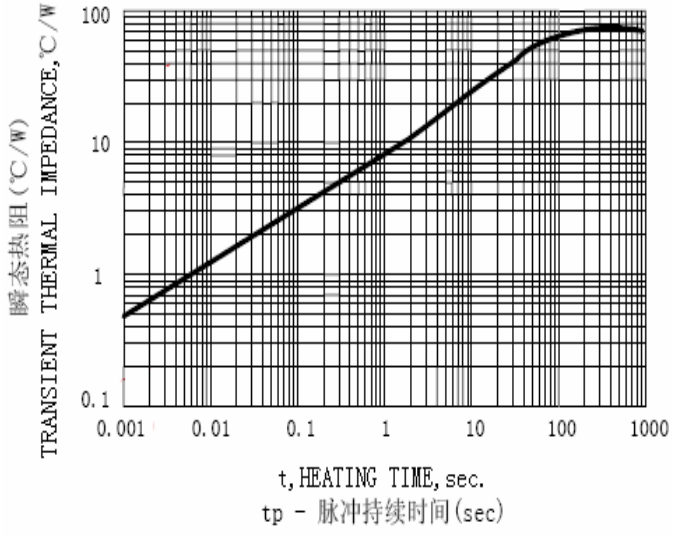

FIG. 6 –浪涌特性曲線（最大值）
FIG. 6 –MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT