

15W LOW CAPACITANCE SMD UNI-DIRECTIONAL TVS FOR ESD PROTECTION DIODES, 5V

Top View Dimensions:
 Total Width: 0.071 (1.80) / 0.063 (1.60)
 Height: 0.033 (0.85) / 0.029 (0.75)

Side View Dimensions:
 Lead Spacing: 0.014 (0.35) Typ.
 Lead Height: 0.022 (0.55) / 0.018 (0.45)
 Lead Width: 0.0236 (0.60) Typ.

Bottom View Dimensions:
 Lead Spacing: 0.016 (0.40) Typ.

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. LOW CLAMPING VOLTAGE/LOW CAPACITANCE 0.4pF MAX
3. GOLD PLATED TERMINALS
4. IEC COMPATIBILITY:
 IEC61000-4-2 (ESD) ±15KV (AIR), ±8KV (CONTACT)
 IEC61000-4-4 (EFT) 80A (5/50nS)
 IEC61000-4-5 (LIGHTNING) 1A (8/20μS)
5. LOW LEAKAGE CURRENT
6. CASE: MOLDED PLASTIC 0603
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.002 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE
 i.e. ESD5LFN5.0C-H: RoHS COMPLIANT/HALOGEN FREE

ELECTRICAL CHARACTERISTICS

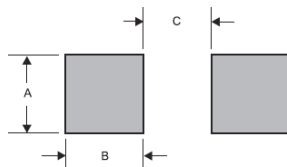
MAXIMUM RATINGS (T_A =25°C UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL	VALUES	UNITS
PEAK PULSE POWER, tp=8/20 μS	PPP	15	W
STORAGE TEMPERATURE RANGE	T _{STG}	- 55 TO +150	°C
OPERATING JUNCTION TEMPERATURE RANGE	T _J	- 55 TO +125	°C

PART NUMBER	Max. V _{RWM} (V)	Max I _R @ V _{RWM} (μA)	Min V _{BR} @ I _T =1mA (A)	Max V _C @ I _{PP} =1A (V)	Max I _{PP} (A)	MAX C _J @ 1MHz, V _R =0V, (pF)	MARKING
ESD5LFN5.0C	5	2	6	15	1	0.4	N

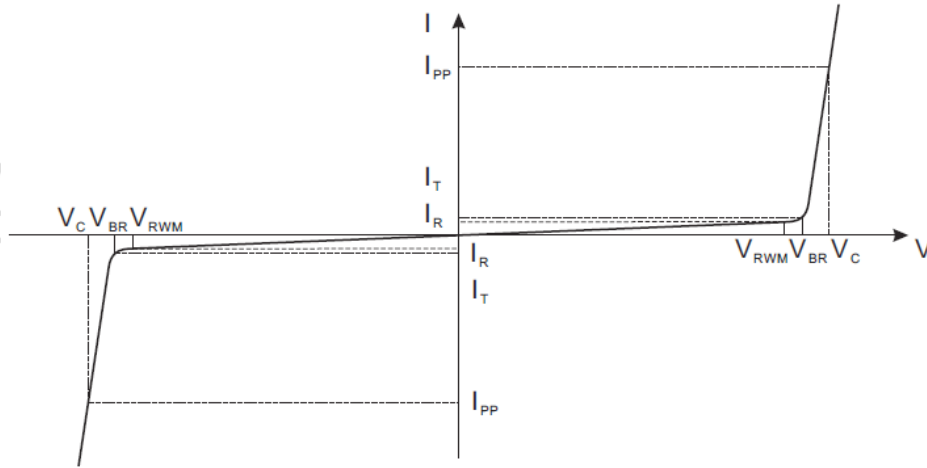
NOTE : 1. SURGE CURRENT WAVEFORM PER FIG 1.
 2. V_{BR} IS MEASURED AT AMBIENT TEMPERATURE OF 25°C.

LAYOUT RECOMMENDATION



PACKAGE	A	B	C
0603	0.032 (0.80)	0.028 (0.70)	0.036 (0.90)

RATINGS AND CHARACTERISTIC CURVES



Bi-Directional TVS

- V_C : Clamping Voltage @ I_{PP}
- I_{PP} : Maximum Reverse Peak Pulse Current
- V_{RWM} : Maximum Reverse Working voltage
- I_R : Maximum Reverse Leakage Current @ V_{RWM}
- V_{BR} : Breakdown voltage @ I_T
- I_T : Test Current
- P_{PP} : Peak Pulse Power
- C_J : Max. Capacitance @ $V_R = 0V$ and $f = 1MHz$

FIG.1- 8 X 20us PULSE WAVEFORM

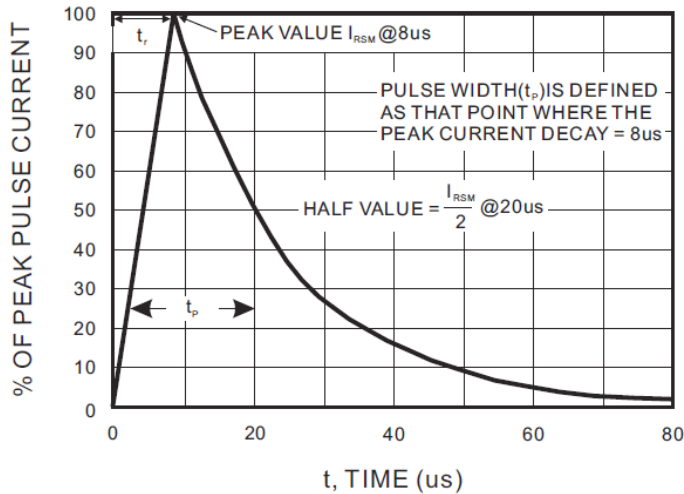


FIG.2- POWER RATING DERATING CURVE

