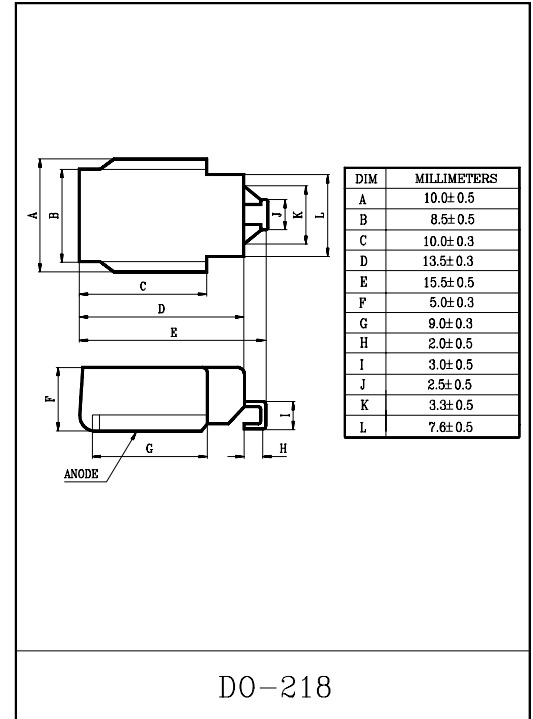


BEST SUITED FOR OVERVOLTAGE PROTECTION OF ELECTRONIC SYSTEM :
ELECTRONIC SYSTEM FOR USE IN AUTOMOBILES
ELECTRONIC SYSTEM FOR COMMERCIAL USE
ELECTRONIC SYSTEM FOR INDUSTRIAL USE
FOR COMMUNICATIONS, CONTROLS, MEASURING INSTRUMENTS, ETC.

FEATURES

- Excellent clamp voltage characteristics that protect electronic system from any kind of surge.
- High surge power withstanding capabilities that absorb load dump surge.
- Excellent surge responsibility for steep surge absorption.
- Surface mount type is available for easy applications. Zxial lead type is also available.
- Although the typical zener voltage is $V_Z=27V$, we can provide the products other than the typical values.
- Corresponds to taping packages. (500P/Reel)



MAXIMUM RATINGS ($T_a=25^\circ C$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--|-----------|---------|------------|
| Allowable Power Dissipation (Note 1) | P | 5 | W |
| Non-Repetitive Peak Reverse Surge Current (See Fig.1 for the exponents.) | I_{RSM} | 62 | A |
| Junction Temperature | T_j | -40~150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -40~150 | $^\circ C$ |

Note 1 : Lead tip temperature $T_L=25^\circ C$.

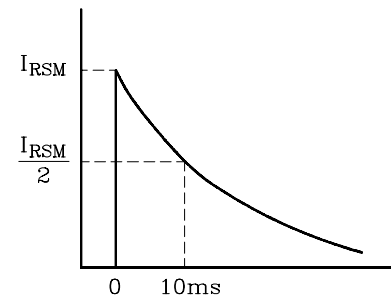


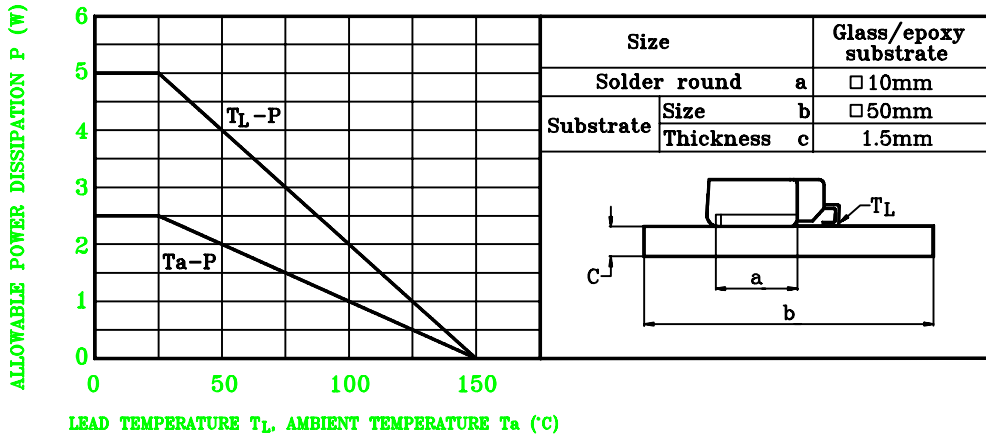
Fig.1

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

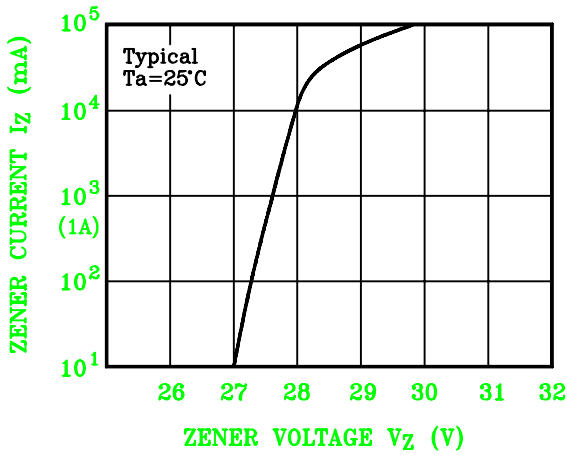
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------|------------|----------------|------|------|------|---------------|
| Zener Voltage | V_Z | $I_Z=10mA$ | 24.0 | 27 | 30.0 | V |
| Operating Resistance | r_d | $I_Z=10mA$ | - | - | 30 | Ω |
| Temperature Coefficient | α_T | $I_Z=10mA$ | - | 23 | 36 | $mV/^\circ C$ |
| Forward Voltage | V_F | $I_F=6A$ | - | - | 1.2 | V |
| Reverse Current | I_R | $V_R=22V$ | - | - | 10 | μA |

Z5W27V

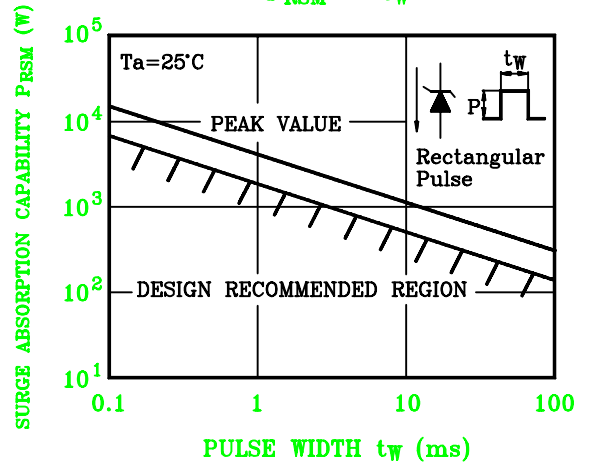
P-T_L, T_a



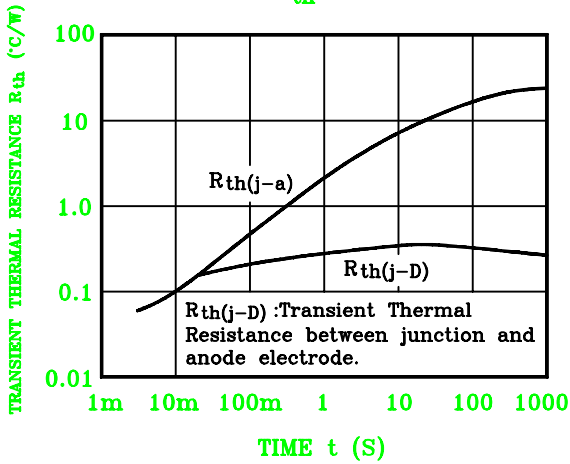
I_Z - V_Z



P_{PRSM} - t_w



R_{th} - t



I_F - V_F

