

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  $V_Z=37V$ , we can provide the products other than the typical values.
- Corresponds to taping packages. (500P/Reel)
- Automotive AEC Q101 Qualified.
- MSL Level 1 guaranteed ( $T_{peak} = 260^\circ C$ )

### MAXIMUM RATING ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Allowable Power Dissipation (Note 1)	P	4	W
Non-Repetitive Peak Reverse Surge Current (See Fig.1 for the exponents.)	$I_{RSM}$	50	A
Junction Temperature	$T_j$	-55 ~ 175	$^\circ C$
Storage Temperature Range	$T_{stg}$	-40 ~ 150	$^\circ C$

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

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Zener Voltage	$V_Z$	$I_Z=10mA$	34	37	40	V
Operating Resistance	$r_d$	$I_Z=10mA$	-	-	35	$\Omega$
Temperature Coefficient	$\alpha_T$	$I_Z=10mA$	-	31	49	mV/ $^\circ C$
Forward Voltage	$V_F$	$I_F=6A$	-	-	1.2	V
Reverse Current	$I_R$	$V_R=32V$	-	-	10	$\mu A$

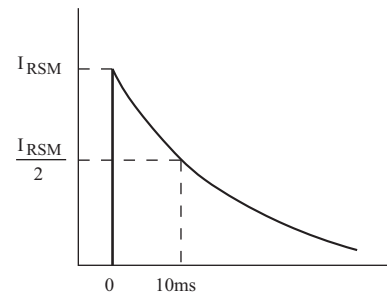
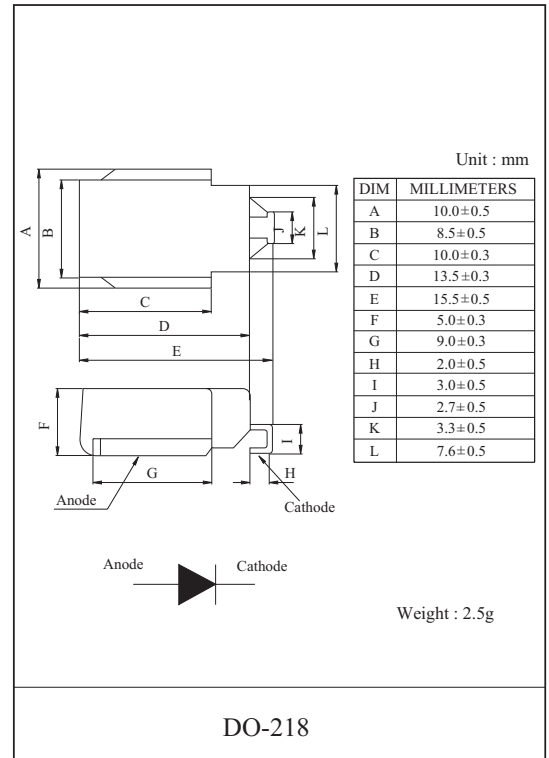
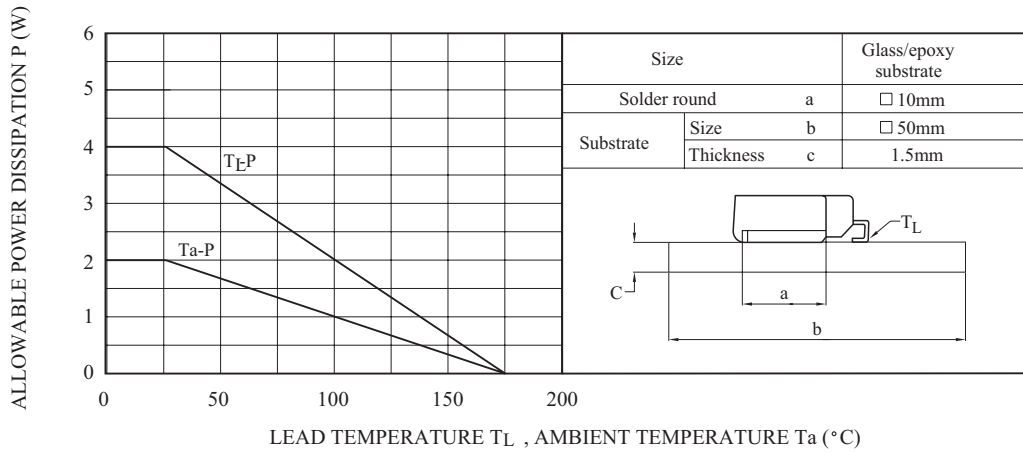


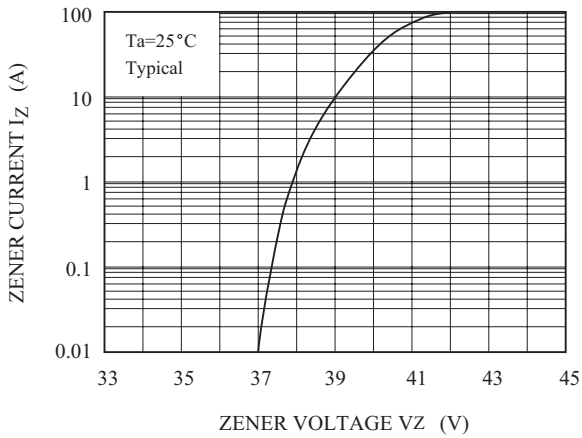
Fig. 1

# Z4W37V

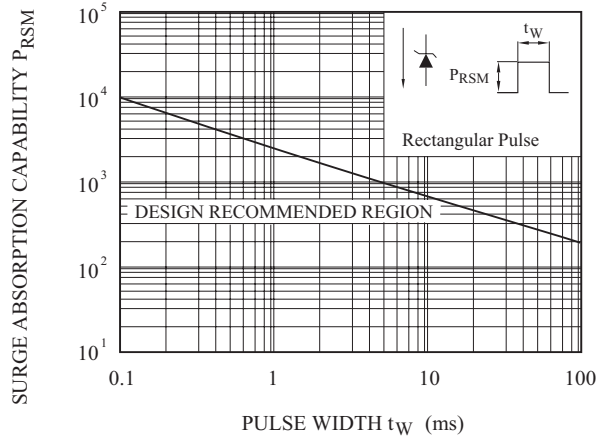
P -  $T_L, T_a$



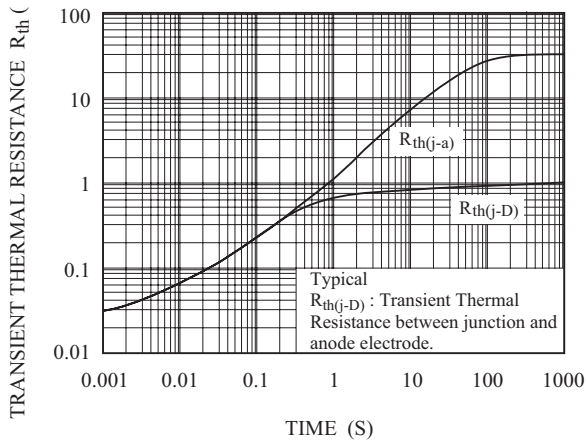
$I_Z - V_Z$



$P_{RSM} - t_W$



$R_{th} - t$



$I_F - V_F$

