

TOSHIBA Zener Diode Silicon Diffused-Junction Type

# U5ZA48C

Best Suited for Overvoltage Protection of Electronic System:

Electronic System for Use in Automobiles

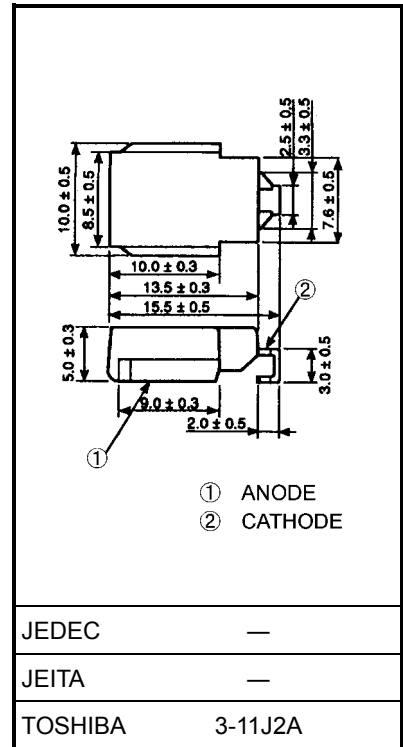
Electronic System for Commercial Use

Electronic System for Industrial Use

For Communications, Controls, Measuring Instruments, etc.

- 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.

Unit: mm



Weight: 2.5 g (typ.)

### Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Allowable power dissipation (Note)	P	5	W
Non-repetitive peak reverse surge current (see figure 1 for the exponents.)	$I_{RSM}$	62	A
Peak one cycle surge forward current (single half sine-wave, t = 10 ms)	$I_{FSM}$	700	A
Junction temperature	$T_j$	-40~150	°C
Storage temperature	$T_{stg}$	-40~150	°C

Note: Lead tip temperature  $T_L = 25^\circ\text{C}$

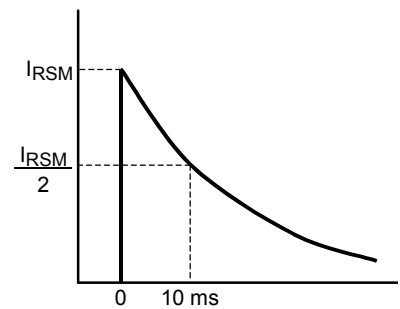
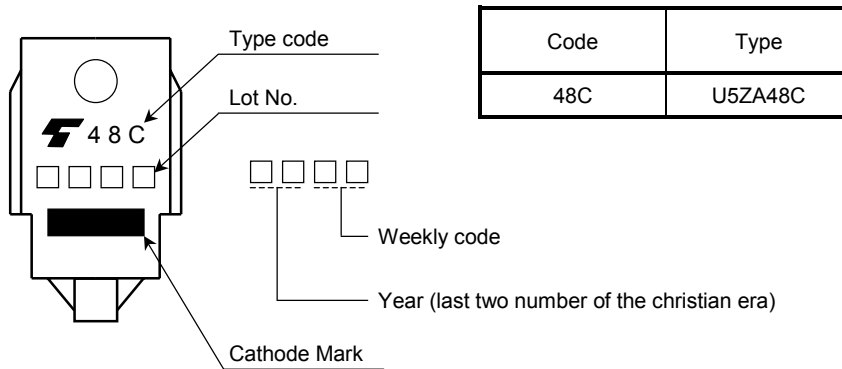


Figure 1

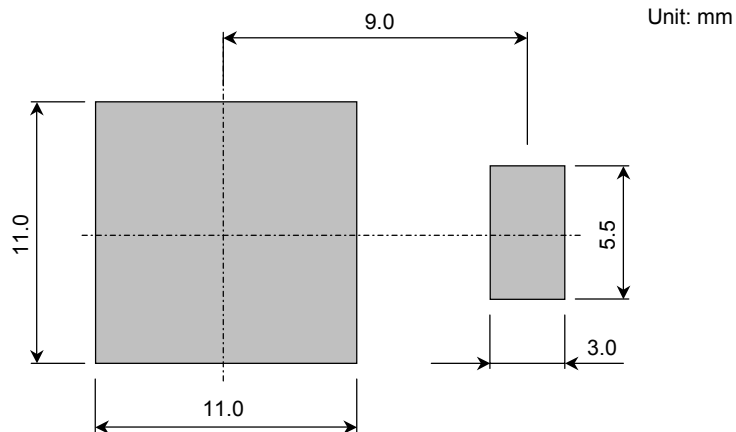
## Electrical Characteristics (Ta = 25°C)

Type No.	Zener Voltage V <sub>Z</sub> [V] (I <sub>Z</sub> = 10 mA)			Operating Resistance r <sub>d</sub> [Ω] (I <sub>Z</sub> = 10 mA)	Temperature Coefficient α <sub>T</sub> [mV/°C] (I <sub>Z</sub> = 10 mA)		Forward Voltage V <sub>F</sub> [V] (I <sub>F</sub> = 6 A)	Reverse Current I <sub>R</sub> [μA] (V <sub>R</sub> = 38.4 V)
	Min	Typ.	Max	Max	Typ.	Max	Max	Max
U5ZA48C	43.2	48.0	52.8	65	39	62	1.2	10

## Marking



## Standard Soldering Pad



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000707EAA

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