

TOSHIBA Zener Diode Silicon Diffused-Junction Type

# U5ZA48C

Best Suited for Overvoltage Protection of Electronic Systems

Electronic Systems for Use in Automobiles

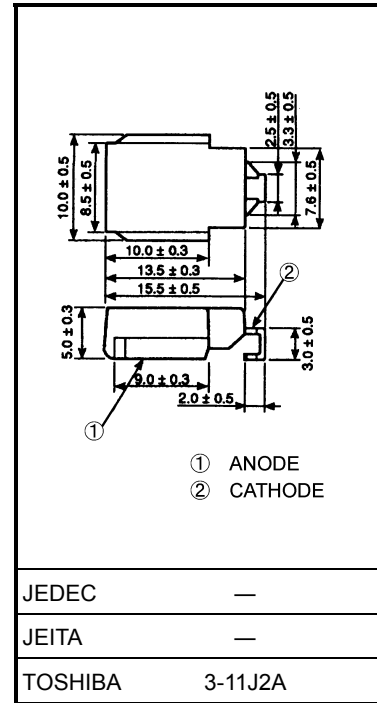
Electronic Systems for Commercial Use

Electronic Systems for Industrial Use

For Communications, Controls, Measuring Instruments, etc.

- High surge power withstanding capabilities that absorb load dump surge.
- Excellent surge response for steep surge absorption.
- Suitable for tape packaging

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.)	$I_{RSM}$	50	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  $T_L = 25^\circ\text{C}$

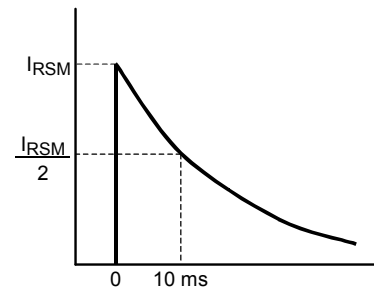


Figure 1

## 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

Lead (Pb)-free marking, lot code, etc.

Part No. (or abbreviation code)

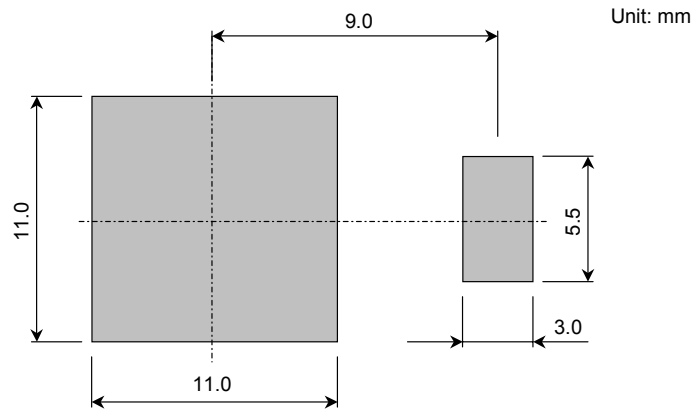
A line indicates lead (Pb)-free package or lead (Pb)-free finish.

Lot No.

Cathode mark

Abbreviation Code	Part No.
48C	U5ZA48C

## Standard Soldering Pad



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