



CAN bus ESD Protection Diode



Features

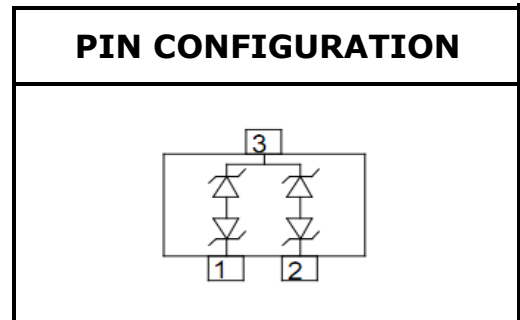
- Low capacitance : 28pF (typ.)
- Reverse standoff voltage : 24V
- IEC61000-4-2 (ESD) : ±30kV (air)
- IEC61000-4-2 (ESD) : ±30kV (contact)
- IEC61000-4-5 (Surge) : 8A (8/20µs)
- Marking : 6R-

Main applications

- CAN bus protection
- Automotive applications

Ordering Information

Device	Qty per Reel	Reel Size
YT2824CS	3000	7Inch



Maximum Ratings (TA=25°C unless otherwise noted)

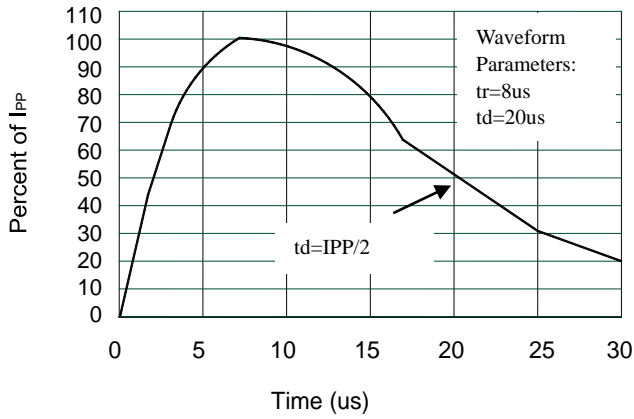
Parameter	Symbol	Test conditions	Limit	Unit
ESD Rating per IEC61000-4-2	V _{ESD}	Contact	±30	kV
		Air	±30	
Peak pulse power	P _{PK}	tp = 8/20 µs	350	W
Peak Pulse Current	I _{PP}	tp = 8/20 µs	8	A
Operating temperature Range	T _J		-55~+ 150	°C
Storage temperature Range	T _{STG}		-55~+ 150	°C

Electrical Characteristics (TA=25°C unless otherwise noted)

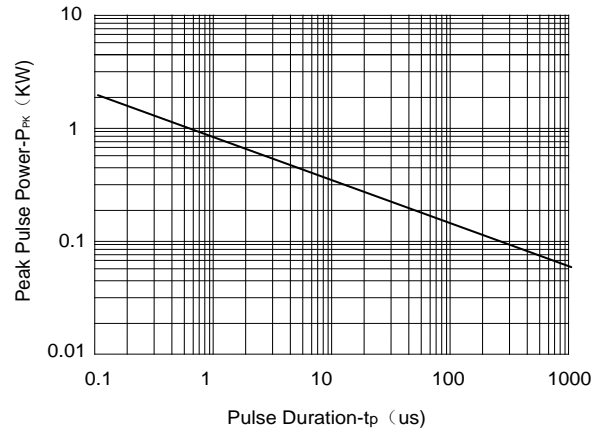
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse working voltage	V _{RWM}		-	-	24	V
Breakdown voltage	V _{BR}	I _T =1mA	26.2	-	-	V
Reverse leakage current	I _R	V _{RWM} =24V	-	1	10	nA
Surge clamping voltage (tp=8/20us)	V _C	I _{PP} =1A	-	-	34	V
		I _{PP} =8A	-	50	66	V
Junction Capacitance	C _J	V _R =0V, f=1MHz	-	28	40	pF

DEVICE CHARACTERISTICS

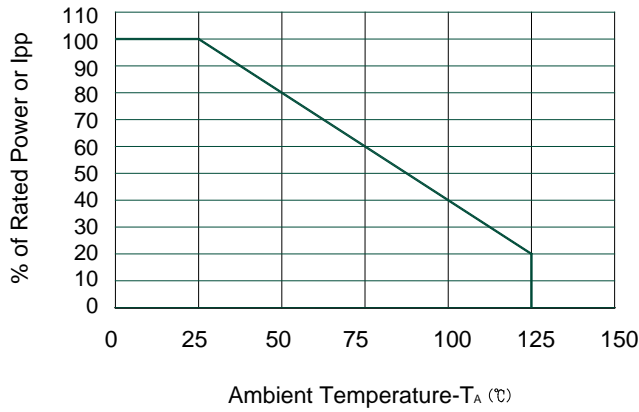
YT2824CS



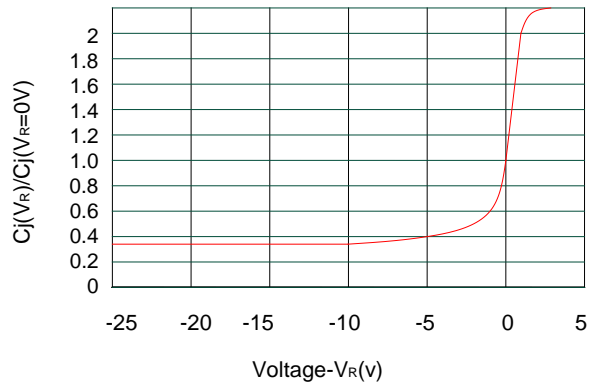
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

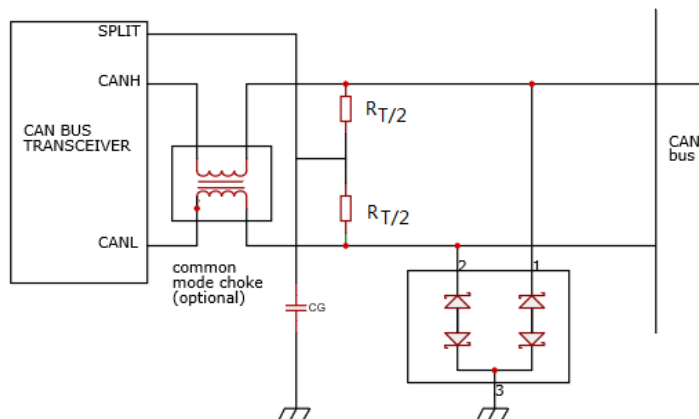


Power Derating Curve



Junction Capacitance vs. Reverse Voltage

Typical applications

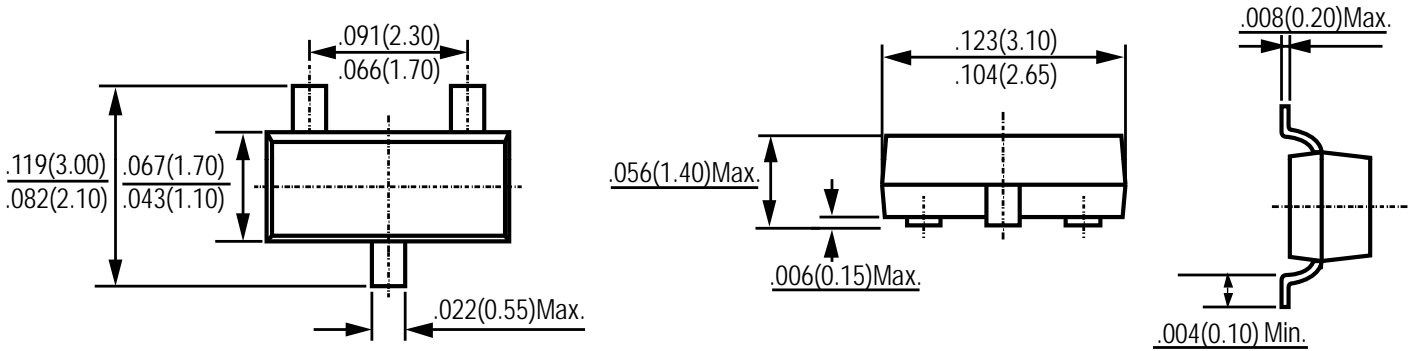


Typical application: ESD protection of two automotive CAN bus lines

PACKAGE OUTLINE & DIMENSIONS

YT2824CS

Package Outline Dimensions



SOT-23

Dimensions in inches and (millimeters)

Suggested Pad Layout

Dimension	Outline	SOT-23 (mm)
A		2.90
C		0.80
D		0.90
E		2.00
F		1.35

