

optocoupler. The relay is ideal for performing switchhook and dial-pulse switching while the optocoupler performs ring-detection and loop current sensing functions. Both the Relay and Optocoupler provide 3750 Vrms of input to output isolation.

The Relay uses high voltage DMOS technology, and features low ON-resistance, high breakdown voltage that protects the relay from telephone line induced lightning surges.

The optocoupler provides bidirectional current sensing via two antiparallel GaAs infrared emitting diodes. The opto channel provides a minimum CTR of 30% at ± 1 mA.

Part Name: 'A' signifies Surface Mount

Applications

Telecommunications - Telecom Switching; Tip/Ring Circuits; Modem Switching (Laptop, Notebook, Pocket Size); Hookswitch; Dial Pulsing; Ground Start; Ringer Injection; Loop Detect; Ring Detect

Absolute Maximum Ratings (Ta=25°C)

Isolation Test Voltage:	3750 Vrms
Isolation Resistance:	≥ 10 Gohm (Vio=500V, Ta=25°C)
Storage Temperature:	-40°C to +150°C
Operating Temperature:	-40°C to +85°C
Junction Temperature:	100°C
Lead Soldering:	260°C for 10s, 2mm from case
Load Type:	AC/DC

MOS Relay Detector

Input Emitter

Reverse Voltage:	5.0V	-
Operation Input Current:	5mA	± 6 mA
Continuous Forward Current:	5mA-50mA	± 50 mA
Peak Forward Current (1s):	1A	± 1 A
Recovery Input Current:	0.2mA	± 5 μ A
Forward Voltage:	2.0V	1.2V
Power Dissipation:	100mW	75mW
Derate Linearly above 25°C:	1.3mW/°C	

Output Detector

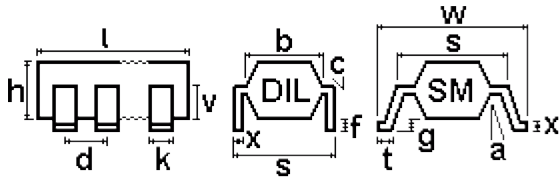
Output Breakdown Voltage:	400V	60Vdc
Continuous Load Current:	± 130 mA	-
Surge Load Current:	300mA	-
Off-State Leakage Current, Max:	1 μ A	0.3 μ A
Output Terminal Capacitance	6pF	-
On-Resistance:	20 ohm (Typ) 30 ohm (Max)	
Power Dissipation:	500mW	150mW

Characteristics

Turn-on Time:	0.8ms (Typ)	5 μ s (Typ)
	1.5ms (Max)	20 μ s (Max)

Turn-off Time:	0.3ms (Typ)	4μs (Typ)
	1ms (Max)	20μs (Max)
Total Power Dissipation:	550mW	200mW
Derate linearly from 25°C	2.5mW/°C	

Dimensions



Units: mm; Tolerance: ±0.1 mm

Package	DIL	SMD
b	6.5	
c	13 degrees	
d	2.54	
f	+3.4	
g		-1.475
h	3.5	
k	0.5	1.22
l	9.68	
s	7.62	8.39
t		1.4
v		1.875
w		11.9
x	0.254±0.05	

End Pin Tip Midpoint to End Face Profile Edge - SMD: 1.03

Thickness at s Measurement Endpoints - SMD: 0.86

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