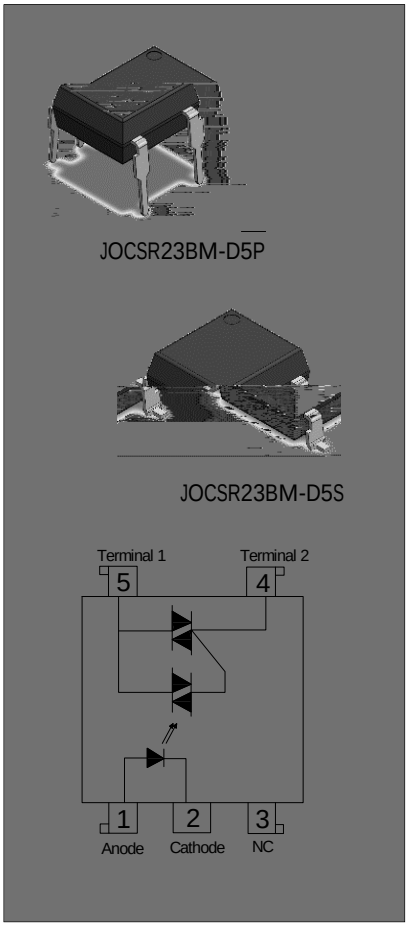
JOCSR23BM-D5P/S Series

Rev.A.1.0

DESCRIPTION:

The products are 5-pin solid-state relay opto-couplers. The device combines an AlGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon random-phase photo triac to drive a power triac in a plastic DIP5 package with different lead forming options. The products are widely used in solenoid/valve controls, lighting controls, motor controls, temperature controls, static AC power switches, solid state relays, interfacing microprocessors to 265 V_{AC} peripherals.



MAIN FEATURES:

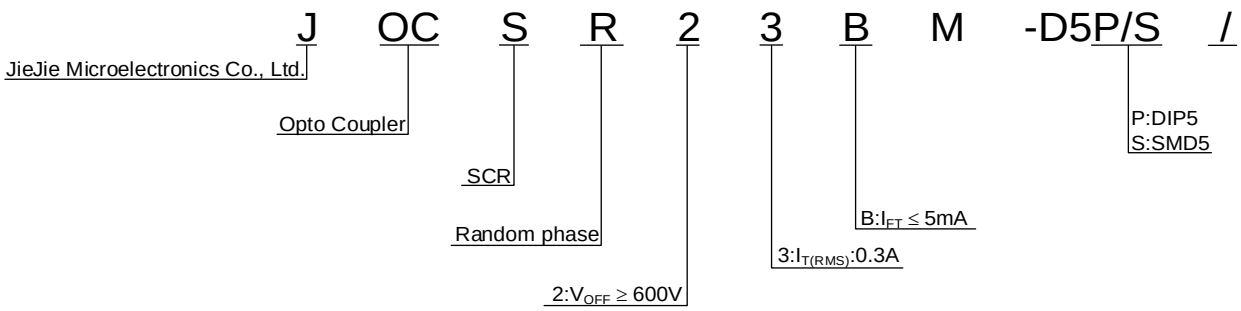
High isolation 5000 Vrms
DC input with triac output
Operating temperature range - 40°C to 110 °C
REACH & RoHS compliance
HBM: H3B; MM: M4; CDM: C3
CQC approved
VDE approved
UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1	A
	Reverse Voltage	V_R	6	V
	Power Dissipation	P_D	75	mW
Output	Repetitive peak off-state voltage	V_{DRM}	600	V
	Repetitive peak reverse voltage	V_{RRM}	600	V
	Critical rate of rise of on-state current	dI/dt	100	A/μs
	On-state RMS Current (T_a≤80)	$I_{T(RMS)}$	0.3	A
	Non repetitive surge peak on-state current (full cycle , t_p=20ms)	I_{TSM}	3	A
	junction to case (AC)	$R_{th(j-c)}$	65	/W

Output Power Dissipation	P_O	250	mW

ORDERING INFORMATION



Characteristics Curves

FIG.1: Max. Allowable LED Forward Current vs. Ambient Temperature

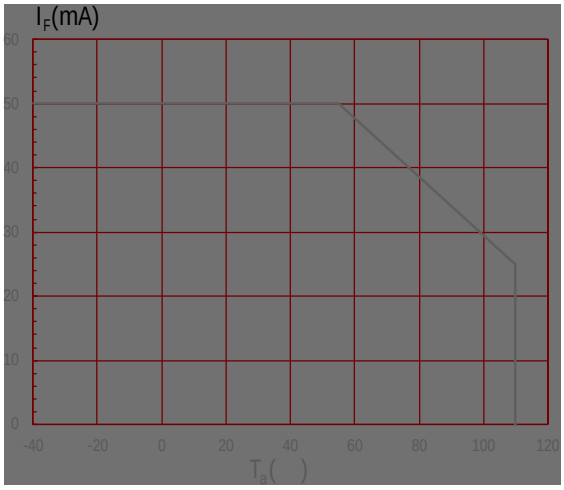


FIG.2: On-state Terminal Current vs. Ambient Temperature

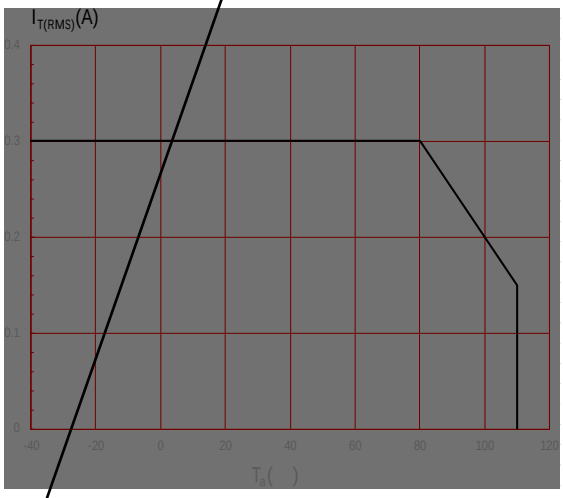


FIG.7: On-state characteristics

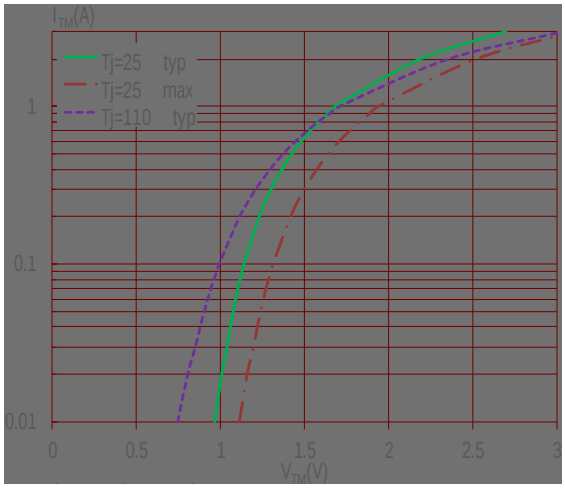


FIG.8: Normalized Holding Current vs. Ambient Temperature

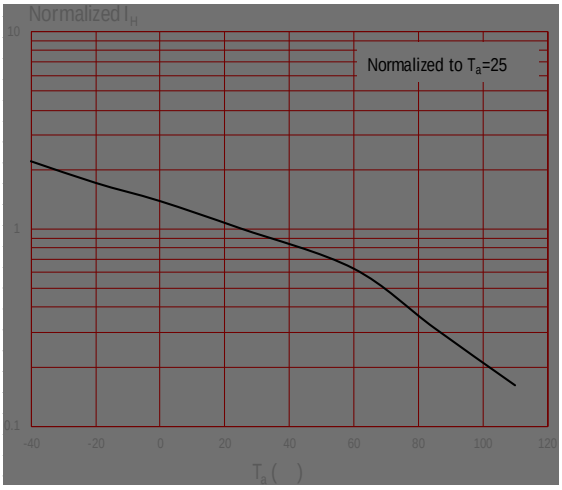
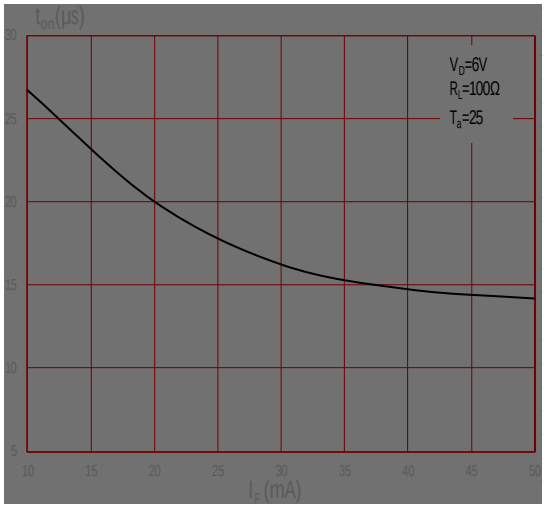


FIG.9: Turn On Time vs. Forward Current

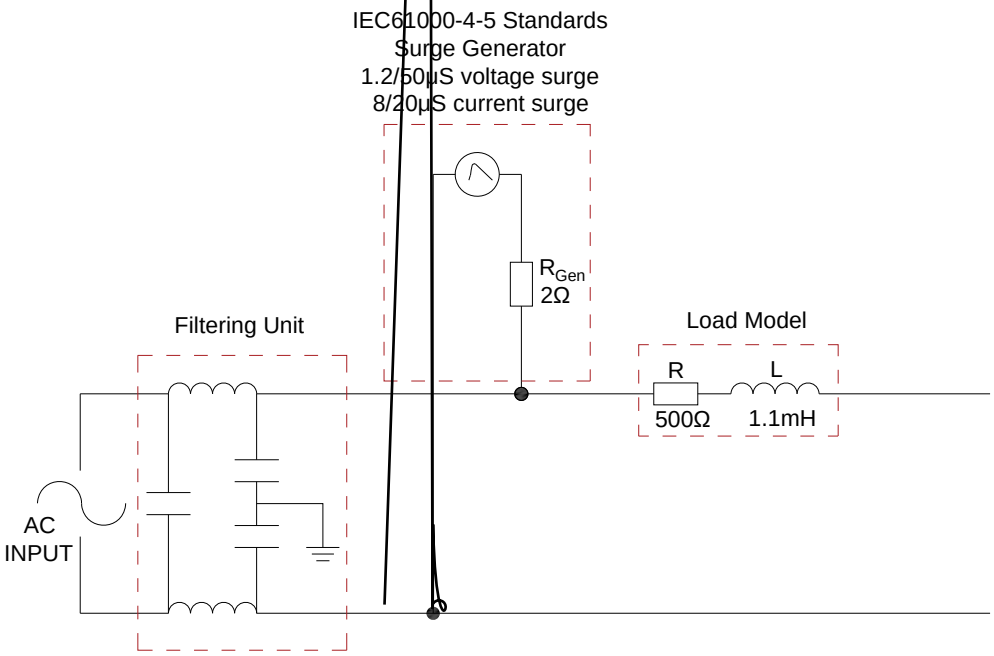


TEST CIRCUITS

FIG.10: Test Circuits of Turn On Time

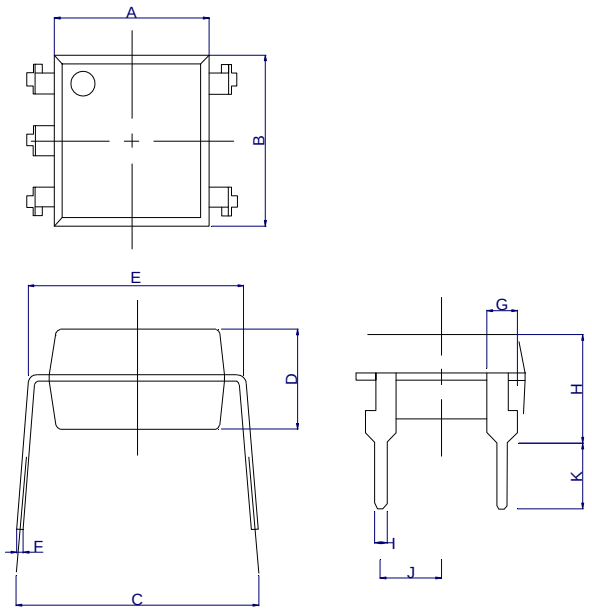
FIG.11: Waveforms of Turn On Time

FIG.12: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



Package Dimension (Unit: mm)

Standard DIP Type:



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	6.20		6.60	0.244		0.260
B	6.92		7.32	0.272		0.288
C	7.15		8.95	0.281		0.352
D	3.20		3.60	0.126		0.142
E	7.32		7.92	0.288		0.312
F						
G	1.15		1.35	0.045		0.053
H	3.90		4.50	0.154		0.177
I						
J						
K						

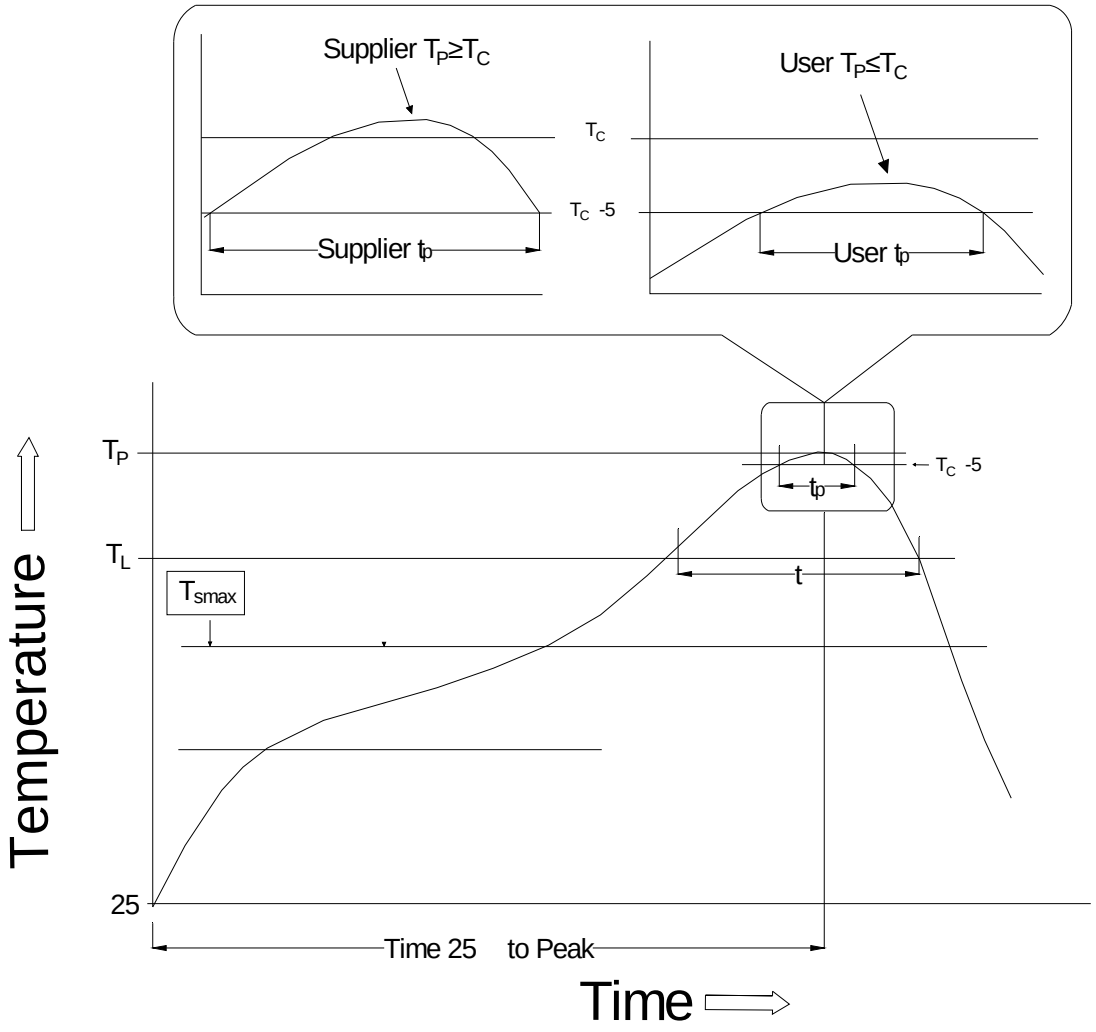
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CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

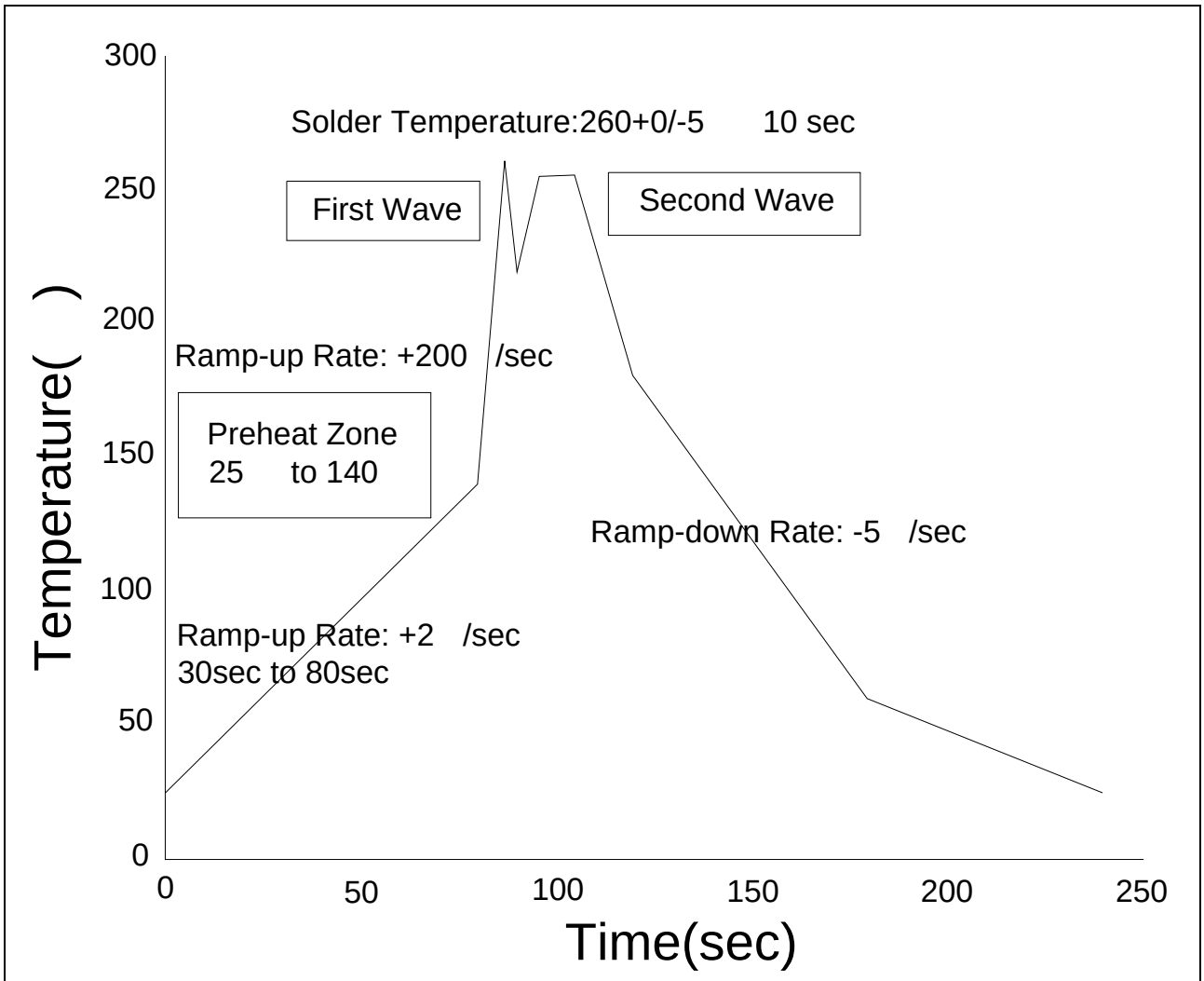
Option S

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
D0		1.50			0.059	
P0	3.90	4.00		0.154	0.157	
P1	11.90	12.00		0.469	0.472	
P2	1.90	2.00		0.075	0.079	
E	1.65	1.75		0.065	0.069	
F	7.45	7.50	7.55	0.293	0.295	0.297
T	0.35	0.40			0.016	
W	15.70	16.00		0.618	0.630	

REFLOW INFORMATION



WAVE SOLDERING



HAND SOLDERING BY SOLDERING IRON	
Soldering Temperature	360 ± 5
Soldering Time	3s max.

Note: