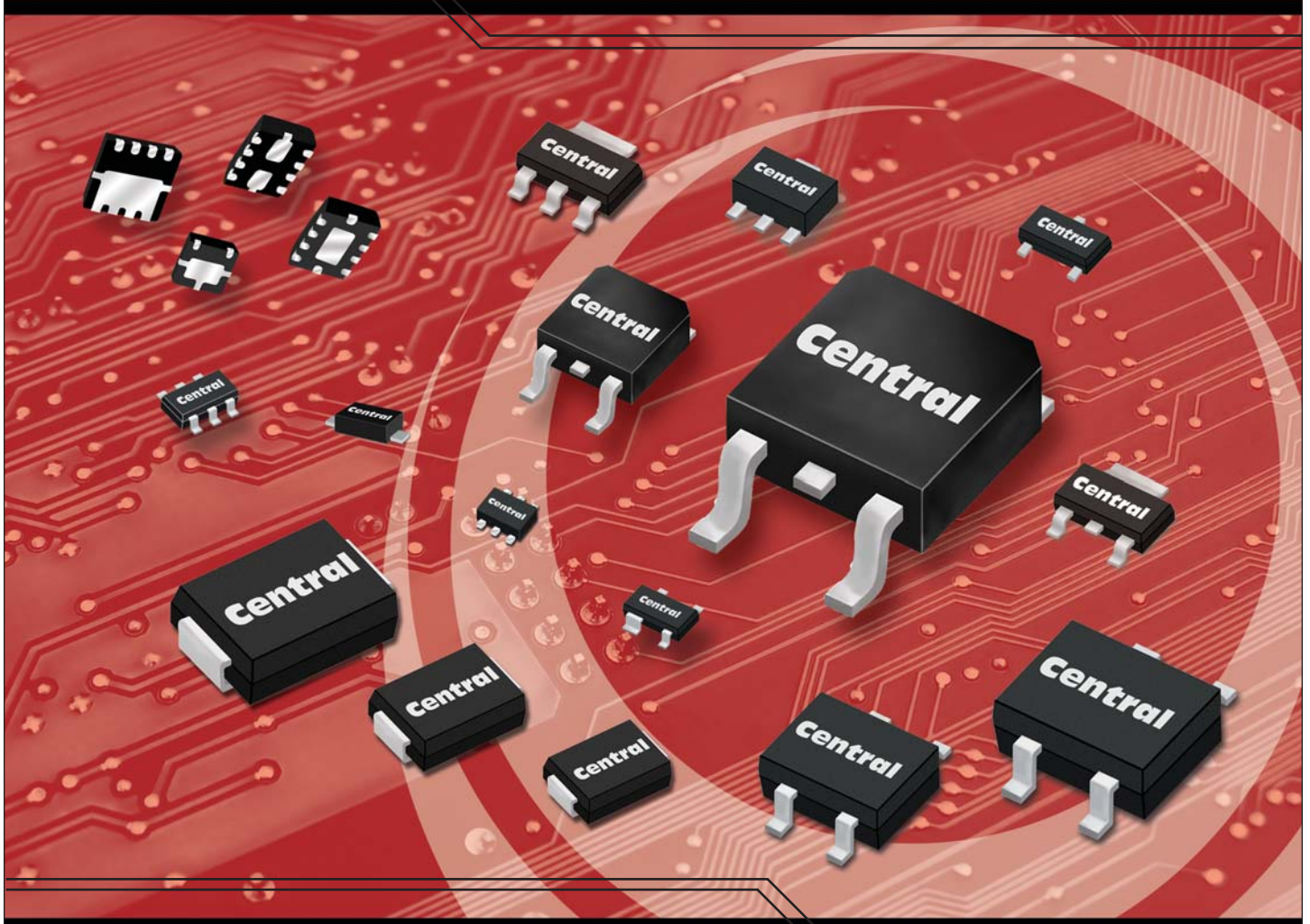











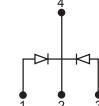

Rectifiers



- General Purpose Rectifiers
- Fast Recovery Rectifiers
- Ultra Fast Recovery Rectifiers
- Super Fast Recovery Rectifiers
- Schottky Rectifiers
- Bridge Rectifiers




Central[™]
Semiconductor Corp.

1.0 to 3.0 Amperes
200 to 1000 Volts







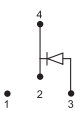
I _O (AMPS)	1.0					2.0	3.0	
@ T _A (°C) **T _L	75**	25	25	25	100**	75	50	75
I _{FSM} (AMPS)	30	10	10	10	30	30	60	200
CASE	 SOD-123F	 SOT-89	 SOT-223		 SMA	 SMB		 SMC
	SINGLE	SINGLE	SINGLE	DUAL COMMON CATHODE	SINGLE	SINGLE	SINGLE	SINGLE
V _{RRM} (VOLTS)								
200	CMMR1-02	–	–	–	CMR1-02M	CMR1-02	CMR2-02	CMR3-02
400	CMMR1-04	CXR1-04	CZR1-04	CZR1-04C†	CMR1-04M	CMR1-04	CMR2-04	CMR3-04
600	CMMR1-06	–	–	–	CMR1-06M	CMR1-06	CMR2-06	CMR3-06
1000	CMMR1-10	–	–	–	CMR1-10M	CMR1-10	CMR2-10	CMR3-10
V _F MAX @ I _F = I _O	1.1V	1.2V	1.2V	1.2V	1.1V	1.1V	1.1V	1.2V
I _R MAX @ V _{RRM}	10µA	1.0µA	1.0µA	1.0µA	5.0µA	10µA	5.0µA	5.0µA
PINOUT								

† Dual Common Cathode (Ratings Per Diode)







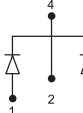
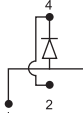
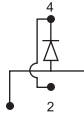
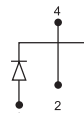
**1.0 Ampere
200 to 1000 Volts**

I_O (AMPS)	1.0	
@ T_A (°C) ** T_L	90**	120**
I_{FSM} (AMPS)	30	30
CASE	 SOD-123F	 SMA
	SINGLE	SINGLE
V_{RRM} (VOLTS)		
200	CMMR1F-02	CMR1F-02M
400	CMMR1F-04	CMR1F-04M
600	CMMR1F-06	CMR1F-06M
1000	–	CMR1F-10M
V_F MAX @ $I_F = I_O$	1.3V	1.3V
I_R MAX @ V_{RRM}	10 μ A	5.0 μ A
t_{rr} (200V)	150ns	150ns
t_{rr} (400V)	150ns	150ns
t_{rr} (600V)	250ns	250ns
t_{rr} (1000V)	–	500ns
PINOUT		

1.0 to 3.0 Amperes
100 to 1000 Volts





I _O (AMPS)	1.0			2.0	3.0			
@ T _A (°C) **T _L	90**	75	25	50	75	75	25	
I _{FSM} (AMPS)	30	30	30	50	100	150	70	
CASE	 SOD-123F	 SMA		 SMB		 SMC	 DPAK	
	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	
V _R RM (VOLTS)								
100	–	CMR1U-01M	CMR1U-01	CMR2U-01	CMR3U-01M	CMR3U-01	–	
200	CMMR1U-02	CMR1U-02M	CMR1U-02	CMR2U-02	CMR3U-02M	CMR3U-02	CUD3-02	
400	CMMR1U-04	CMR1U-04M	CMR1U-04	CMR2U-04	CMR3U-04M	CMR3U-04	–	
600	CMMR1U-06	CMR1U-06M	CMR1U-06	CMR2U-06	CMR3U-06M	CMR3U-06	–	
1000	–	CMR1U-10M	CMR1U-10	–	CMR3U-10M	CMR3U-10	–	
V _F MAX @ I _F = I _O								
100	–	1.0V	1.0V	1.0V	1.0V	1.0V	–	
200	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.25V @ 12A	
400	1.25V	1.25V	1.25V	1.25V	1.25V	1.25V	–	
600	1.4V	1.4V	1.4V	1.4V	1.4V	1.4V	–	
1000	–	1.7V	1.7V	–	1.7V	1.7V	–	
I _R MAX @ V _R RM	10µA	5.0µA	5.0µA	10µA	5.0µA	5.0µA	20µA	
t _{rr} (100V thru 200V)	35ns	35ns	50ns	50ns	50ns	50ns	35ns	
t _{rr} (400V)	50ns	50ns	50ns	50ns	50ns	50ns	–	
t _{rr} (600V)	75ns	75ns	100ns	50ns	100ns	100ns	–	
t _{rr} (1000V)	–	100ns	100ns	–	100ns	100ns	–	
PINOUT								

5.0 to 16 Amperes
200 to 800 Volts







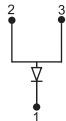
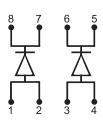
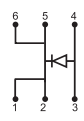


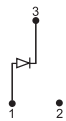
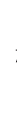
I _O (AMPS)	5.0	6.0	8.0	10	16
@ T _A (°C) *T _C	55	130*	100*	100*	100*
I _{FSM} (AMPS)	175	70	125	100	125
CASE	 SMC SINGLE	 DPAK DUAL COMMON CATHODE	 D²PAK SINGLE	 DPAK SINGLE	 D²PAK DUAL COMMON CATHODE
V _{RRM} (VOLTS)					
200	CMR5U-02	CUD6-02C	CUDD8-02	CUD10-02	CUDD16-02C
400	CMR5U-04	–	CUDD8-04	CUD10-04	CUDD16-04C
600	–	–	–	CUD10-06	–
800	CMR5U-08	–	CUDD8-08	–	CUDD16-08C
V _F MAX @ I _F = I _O	–	–	–	–	–
200	1.0V	1.25 @ 10A	0.975V	0.95V	0.975V @ 8.0A
400	1.3V	–	1.3V	1.3V	1.3V @ 8.0A
600	–	–	–	1.7V	–
800	1.7V	–	1.5V	–	1.5V @ 8.0A
I _R MAX @ V _R RM	10μA	20μA	5μA†	10μA	5μA†
t _{rr} (200V)	50ns	35ns	25ns	35ns	25ns
t _{rr} (400V)	50ns	–	25ns	35ns	25ns
t _{rr} (600V)	–	–	–	35ns	–
t _{rr} (800V)	100ns	–	50ns	–	50ns
PINOUT					

† 200 Volt Device

1.0 to 3.0 Ampere
100 to 600 Volts











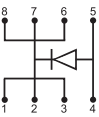


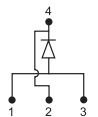
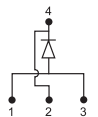
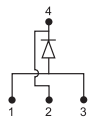
I_O (AMPS)	1.0		3.0
@ T_A (°C) T_L	110**	25	25
I_{FSM} (AMPS)	30	30	100
CASE	 SOD-123F	 SMB	 SMC
	SINGLE	SINGLE	SINGLE
V_{RRM} (VOLTS)			
100	-	CMR1S-01	CMR3S-01
200	CMMR1S-02	CMR1S-02	CMR3S-02
400	-	-	CMR3S-04
600	-	-	CMR3S-06
V_F MAX @ $I_F = I_O$			
100	-	0.95V	0.95V
200	0.95V	0.95V	0.95V
400	-	-	1.25V
600	-	-	1.70V
I_R MAX @ V_{RRM}	10 μ A	5.0 μ A	5.0 μ A
t_{rr}	35ns	35ns	35ns
PINOUT			

1.0 Amperes, 20 to 100 Volts









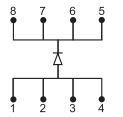
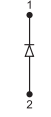

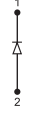
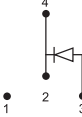
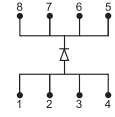
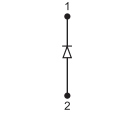

I_O (AMPS)	1.0						
@ T_A (°C) T_L	25	25	25	75**	25	25	75**
I_{FSM} (AMPS)	10	10	10	30	50	12	30
CASE	 TLM322	 TLM832D	SOT-563	 SOD-123F	 SOD-123F	 SOT-23F	 SMA
	SINGLE	DUAL ISOLATED	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE
V_{RRM} (VOLTS)							
20	-	-	-	CMMSH1-20	-	-	CMSH1-20M
40	CTLSH1-40M322	CTLSH1-40M832D	CMLSH1-40	CMMSH1-40	CMMSH1-40L	CMPSH1-4	CMSH1-40M
60	-	-	-	CMMSH1-60	-	-	CMSH1-60M†
100	-	-	-	CMMSH1-100	-	-	CMSH1-100M†
V_F MAX @ $I_F = I_O$							
20	-	-	-	0.45V	-	-	0.50V
40	0.55V	0.55V	0.55V	0.55V	0.45V	0.55V	0.50V
60	-	-	-	0.70V	-	-	0.70V
100	-	-	-	0.85V	-	-	0.85V
I_R MAX @ V_{RRM}	50µA @ 15V	50µA @ 15V	50µA @ 15V	500µA	500µA	100µA @ 30V	500µA
PINOUT							

† $T_L=100^\circ\text{C}$ for 60V & 100V.

1.0 to 2.0 Amperes, 20 to 100 Volts









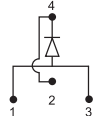
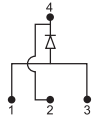
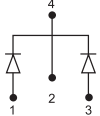
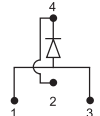
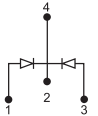
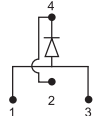
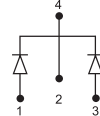
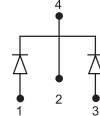
I _O (AMPS)	1.0			2.0				
@ T _A (°C) **T _L	25	75	25	25	75**	55	105**	25
I _{FSM} (AMPS)	30	30	10	50	50	50	50	10
CASE								
	SMA	SMB	SOT-89	TLM832	SMA	SMB	SMB	SOT-223
	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE
V _{RRM} (VOLTS)								
20	CMSH1-20ML	CMSH1-20	-	-	CMSH2-20M	CMSH2-20	CMSH2-20L	-
40	CMSH1-40ML	CMSH1-40	CXSH-4	CTLISH2-40M832	CMSH2-40M	CMSH2-40	CMSH2-40L	CZSH-4
60	-	CMSH1-60	-	-	CMSH2-60M	CMSH2-60	-	-
100	-	CMSH1-100	-	-	CMSH2-100M	CMSH2-100	-	-
V _F MAX @ I _F = I _O								
20	0.38V	0.55V	-	-	0.55V	0.50V	0.38V	-
40	0.40V	0.55V	0.55V	0.50V	0.55V	0.50V	0.40V	0.60V
60	-	0.70V	-	-	0.70V	0.70V	-	-
100	-	0.85V	-	-	0.85V	0.85V	-	-
I _R MAX @ V _{RRM}	500µA	500µA	1,000µA	200µA	500µA	500µA	500µA	1,000µA
PINOUT								

3.0 to 5.0 Amperes
20 to 100 Volts

I _O (AMPS)	3.0						5.0	
@ T _A (°C) **T _L	25	75**	75**	75	75**	120**	25	75
I _{FSM} (AMPS)	25	80	80	150	100	75 50†	50	125
CASE	 TLM833	 SMA	 SMB	 SMC	 SMC	 DPAK	 TLM833	 SMC
	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE
V _{RRM} (VOLTS)								
20	–	CMSH3-20MA	CMSH3-20M	CMSH3-20	CMSH3-20L	–	–	CMSH5-20
25	–	–	–	–	–	–	–	–
30	CTLSH3-30M833	–	–	–	–	–	–	–
40	–	CMSH3-40MA	CMSH3-40M	CMSH3-40	CMSH3-40L	CSHD3-40	CTLSH5-40M833	CMSH5-40
60	–	CMSH3-60MA	CMSH3-60M	CMSH3-60	–	CSHD3-60	–	CMSH5-60
100	–	CMSH3-100MA	CMSH3-100M	CMSH3-100	–	CSHD3-100	–	CMSH5-100
V _F MAX @ I _F = I _O								
20	–	0.50V	0.55V	0.50V	0.38V	–	–	0.55V
25	–	–	–	–	–	–	–	–
30	0.45V	–	–	–	–	–	–	–
40	–	0.50V	0.55V	0.50V	0.40V	0.65V	0.52V	0.55V
60	–	0.70V	0.75V	0.70V	–	0.75V	–	0.75V
100	–	0.85V	0.85V	0.80V	–	0.85V	–	0.85V
I _R MAX @ V _{RRM}	1.0mA	500µA	500µA	500µA	500µA	30µA†	200µA	3.0mA
PINOUT								

† 60V & 100V Devices






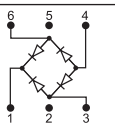
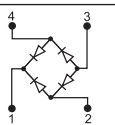
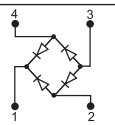
5.0 to 16 Amperes
40 to 100 Volts

I _O (AMPS)	5.0			6.0	8.0	10		16
@ T _A (°C) *T _C **T _L	75**	120*	75	120	100	25	120	90
I _{FSM} (AMPS)	100	80	125	75 50†	150	125	200	150
CASE	 DPAK	 DPAK	 SOT-223	 DPAK	 D ² PAK	 SOT-223C	 DPAK	 D ² PAK
	SINGLE	SINGLE	SINGLE	DUAL COMMON CATHODE	SINGLE	DUAL COMMON CATHODE	SINGLE	DUAL COMMON CATHODE
V _R RM (VOLTS)								
25	–	CSHD5-25L	–	–	–	–	–	–
40	CSHD5-40	–	CZSH5-40	CSHD6-40C	CSHDD8-40	CZSH10-40CN	–	CSHDD16-40C
45	–	–	–	–	–	–	CSHD10-45L	–
60	CSHD5-60	–	–	CSHD6-60C	CSHDD8-60	–	–	CSHDD16-60C
100	CSHD5-100	–	–	CSHD6-100C	CSHDD8-100	–	–	CSHDD16-100C
V _F MAX @ I _F = I _O								
25	–	0.47V	–	–	–	–	–	–
40	0.55V	–	0.55V	0.65V Per Leg	0.65V	0.60V Per Leg	–	0.65V Per Leg
45	–	–	–	–	–	–	0.75V	–
60	0.75V	–	–	0.70V Per Leg	0.75V	–	–	0.75V Per Leg
100	0.85V	–	–	0.75V Per Leg	0.85V	–	–	0.85V Per Leg
I _R MAX @ V _R RM	0.2mA	500µA	3.0mA	30µA†	100µA	3.0mA	100µA	100µA
PINOUT								

† 60V & 100V Devices

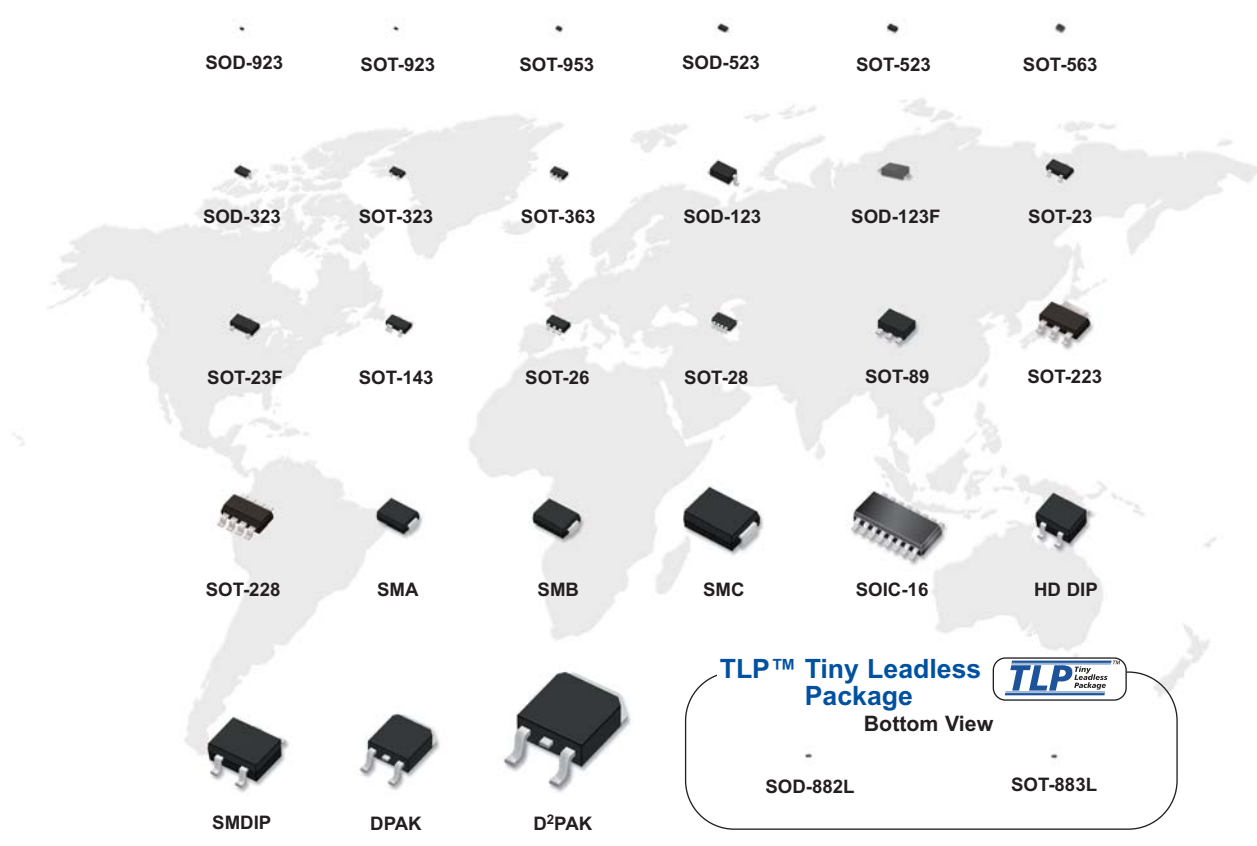
Bridge Rectifiers

Single Phase, Full Wave
0.14 to 2.0 Amperes
40 to 1000 Volts

I _O (AMPS)	0.14		0.5	1.0					2.0	
@ T _A (°C)	25	25	40	25	25	50	40	40	25	
I _{FSM} (AMPS)	-	-	30	20	20	50	50	50	30	
CASE	 SOT-363	 SOT-143	HD _{BRIDGE}  HD DIP			 SMDIP			HD _{BRIDGE}  HD DIP	
	GENERAL PURPOSE	GENERAL PURPOSE	GENERAL PURPOSE	SCHOTTKY	LOW V _F SCHOTTKY	GENERAL PURPOSE	FAST RECOVERY	ULTRA FAST RECOVERY	SCHOTTKY	
V _{RRM} (VOLTS)										
40	-	-	-	-	CBRHDSH1-40L	-	-	-	CBRHDSH2-40	
60	CMKBR-6F	CMFBR-6F	-	-	-	-	-	-	-	
90	-	-	-	CBRHDSH1-90	-	-	-	-	-	
100	-	-	CBRHD-01	CBRHDSH1-100	-	-	-	CBR1U-D010S	-	
200	-	-	CBRHD-02	-	-	CBR1-D020S	CBR1F-D020S	CBR1U-D020S	-	
400	-	-	CBRHD-04	-	-	CBR1-D040S	CBR1F-D040S	-	-	
600	-	-	CBRHD-06	-	-	CBR1-D060S	CBR1F-D060S	-	-	
1000	-	-	CBRHD-10*	-	-	CBR1-D100S	CBR1F-D100S*	-	-	
V _F MAX @ I _F	1.0V @ 20mA	1.0V @ 20mA	1.0V @ 0.4A	0.75V @ 1.0A	0.44V @ 1.0A	1.1V @ 1.0A	1.3V @ 1.0A	1.05V @ 1.0A	0.5V @ 2.0A	
I _R MAX @ V _{RRM}	10nA @ 50V	10nA @ 50V	5.0μA	10μA	50μA	10μA	5μA	5μA	50μA	
t _{rr} (60V)	1.0μs typ.	1.0μs typ.	-	-	-	-	-	-	-	
t _{rr} (100 - 400V)	-	-	-	-	-	-	200ns	50ns	-	
t _{rr} (600V)	-	-	-	-	-	-	300ns	-	-	
t _{rr} (1000V)	-	-	-	-	-	-	500ns	-	-	
PINOUT										

* Available on special order; please consult factory.

Surface Mount Packages (Actual Size)



TLP™ Tiny Leadless Package
Bottom View

SOD-882L SOT-883L

TLM™ Tiny Leadless Module
Bottom View

TLM621 TLM621H TLM322 TLM622 TLM832 TLM832D TLM833



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