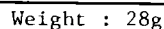


SM16(D, G, J)Z41

Unit in mm

- . Repetitive Peak Off-State Voltage : $V_{DRM}=200\sim 600V$
- . R.M.S On-State Current : $I_T(RMS)=16A$
- . Surge Isolation Voltage : $V_{ISOL}=2000V$ AC
- . Suitable for Heating Controls, Motor Controls, Dimmers and Power Switching System.

CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Off-State Voltage	SM16DZ41	V _{DRM}	200	V
	SM16GZ41		400	
	SM16JZ41		600	
R.M.S On-State Current (Full Sine Waveform Tc=78°C)		I _{T(RMS)}	16	A
Peak One Cycle Surge On-State Current (Non-Repetitive)		I _{TSM}	150(50Hz)	A
			165(60Hz)	
I ² t Limit Value (t=1~10ms)		I ² t	110	A ² s
Peak Gate Power Dissipation		P _{GM}	5	W
Average Gate Power Dissipation		P _{G(AV)}	0.5	W
Peak Gate Voltage		V _{GM}	10	V
Peak Gate Current		I _{GM}	2	A
Junction Temperature		T _j	-40~125	°C
Storage Temperature Range		T _{stg}	-40~125	°C
Isolation Voltage AC t=1min.		V _{ISOL}	2000	V

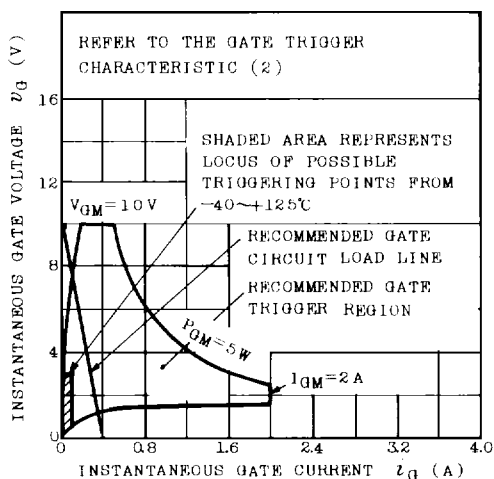


SM16(D,G,J)Z41

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION		MIN.	MAX.	UNIT
Repetitive Peak Off-State Current		I_{DRM}	V_{DRM} =Rated, T_j =125 ^o C		-	3	mA
Gate Trigger Voltage	I	V_{GT}	V_D =12V, R_L =20Ω	T2(+), Gate(+)	-	3	V
	II			T2(+), Gate(-)	-	3	
	III			T2(-), Gate(-)	-	3	
Gate Trigger Current	I	I_{GT}		T2(+), Gate(+)	-	50	mA
	II			T2(+), Gate(-)	-	50	
	III			T2(-), Gate(-)	-	50	
Peak On-State Voltage		V_{TM}	I_{TM} =25A		-	1.5	V
Gate Non-Trigger Voltage		V_{GD}	V_D =0.5 × Rated, T_c =125 ^o C		0.2	-	V
Holding Current		I_H	R_L =100Ω		-	50	mA
Thermal Resistance		$R_{th(j-c)}$	Junction to Case, AC		-	2.0	^o C/W
Commutation (dv/dt)		(dv/dt) _c	V_D =200V (SM16DZ41) V_D =400V (SM16GZ41, SM16JZ41) -di/dt=9A/ms, T_c =125 ^o C		10	-	V/ μ s

GATE TRIGGER CHARACTERISTIC (1)



GATE TRIGGER CHARACTERISTIC (2)

