

thyristors

TRIACS

HERMETIC PACKAGES

TYPE	STUD/TO-3 FLANGE	SC240	SC245	SC250	SC260	SC265
	PRESS-FIT	SC241	SC246	SC251	SC261	SC266

ELECTRICAL SPECIFICATIONS

VOLTAGE CHARACTERISTICS

V_{DRM}	Repetitive Peak Off-State Voltage @ $T_C = 40^\circ C$ to $+100^\circ C$					
	200V	SC240/1B	SC245/6B	SC250/1B	SC260/1B	SC265/6B
	400V	SC240/1D	SC245/6D	SC250/1D	SC260/1D	SC265/6D
	500V	SC240/1E	SC245/6E	SC250/1E	SC260/1E	SC265/6E
	600V	SC240/1M	SC245/6M	SC250/1M	SC260/1M	SC265/6M
V_{TM}	Max. On-State Voltage at Peak of RMS Current Rating (V)	1.83	1.65	1.65	1.58	1.38

CURRENT CHARACTERISTICS

$I_T(RMS)$	Max. RMS On-State Current (A)	6	10	15	25	40
$T_C(MAX)$	Max. Case Temperature at Rated RMS Current ($^\circ C$) for					
	Non-Isolated Stud/Press-Fit	82	80	86	80	81
	Isolated Stud/Non-Isolated TO-3 Flange	80	78	83	75	74
I_{TSM}	Max. Peak One Cycle Non-Repetitive Surge Current (A)					
	@ 50 Hz	74	90	90	230	275
I_{DRM}	Max. Leakage Current at $T_C = 25^\circ C$ (mA)	0.1	0.1	0.1	0.2	0.2
	Max. DC Holding Current (mAdc)					
I_H	@ $T_C = +25^\circ C$	50	50	50	75	75
	@ $T_C = -40^\circ C$	100	100	100	150	150
I_L	Max. DC Latching Current (mAdc)					
	@ $T_C = +25^\circ C$ MT2 + Gate +	100	100	100	100	100
	MT2 - Gate -	100	100	100	100	100
	MT2 + Gate -	200	200	200	200	200
	@ $T_C = -40^\circ C$ MT2 + Gate +	200	200	200	200	200
	MT2 - Gate -	200	200	200	200	200
	MT2 + Gate -	400	400	400	400	400

BLOCKING

dv/dt	Typical Static dv/dt at Rated V_{DRM} Gate Open Circuited (V/ μ sec)	100	150	250	150	150
$dv/dt (c)$	Min. Commutating dv/dt at Rated V_{DRM} and $di/dt = (0.54) I_T(RMS) A/\mu$ sec, Gate Open Circuited (V/ μ sec)	4	4	4	5	5

TRIGGERING

I_{GT}	Max. Required DC Gate Current to Trigger, MT2 + Gate +, MT2 - Gate -, MT2 + Gate -.					
	@ $V_D = 12 V_{dc}$ (mAdc)					
	@ $T_C = +25^\circ C$	50	50	50	50	80
	@ $T_C = -40^\circ C$	80	80	80	80	120
V_{GT}	Max. Required DC Gate Voltage to Trigger, MT2 + Gate +, MT2 - Gate -, MT2 + Gate -.					
	@ $V_D = 12 V_{dc}$					
	@ $T_C = +25^\circ C$	2.5	2.5	2.5	2.5	2.5
	@ $T_C = -40^\circ C$	3.5	3.5	3.5	3.5	3.5

MECHANICAL SPECIFICATIONS

PACKAGE OUTLINE NUMBER	241(SC241)	241(SC241)	241(SC241)	251(SC261)	251(SC261)
	242, 3, 4, 5	242, 3, 4, 5	242, 3, 4, 5	252, 3, 4, 5	252, 3, 4, 5
	& 6 (SC240)	& 6 (SC240)	& 6 (SC240)	& 6 (SC260)	& 6 (SC260)

PRESS-FIT



241

NON-ISOLATED
STUD



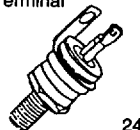
242

ISOLATED STUD
With Solder Ring
Anode Terminal



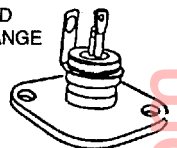
243

ISOLATED STUD
With Press-On
Anode Terminal



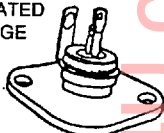
244

ISOLATED
TO-3 FLANGE



245

NON-ISOLATED
TO-3 FLANGE



246

PRESS-FIT



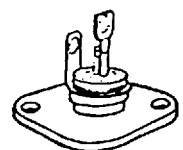
251

NON-ISOLATED
STUD



262

NON-ISOLATED
TO-3 FLANGE



256

ISOLATED STUD
With Solder Ring
Anode Terminal



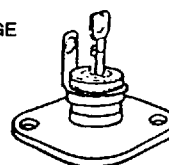
253

ISOLATED STUD
With Press-On
Anode Terminal



254

ISOLATED
TO-3 FLANGE



255