

## 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
	Isolated TO-3 Flange	79	76	80	71	68
$I_{TSM}$	Max. Peak One Cycle Non-Repetitive Surge Current (A)					
	@ 50 Hz	74	90	90	230	275
	@ 60 Hz	80	100	100	250	300
$I_{DRM}$	Max. Leakage Current at $T_C = 25^\circ C$ (mA)	0.1	0.1	0.1	0.2	0.2
$I_H$	Max. DC Holding Current (mAdc)					
	@ $T_C = +25^\circ C$	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/ $\mu$ 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/ $\mu$ sec)	4	4	4	5	5

#### TRIGGERING

$I_{GT}$	Max. Required DC Gate Current to Trigger, MT2 + Gate +, MT2 - Gate -, MT2 + Gate -.					
	@ $V_D = 12$ Vdc (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 -.					
	@ $V_D = 12$ Vdc					
	@ $T_C = +25^\circ C$	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

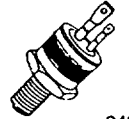
PACKAGE OUTLINE NUMBER	241(SC241)	241(SC241)	241(SC241)	251(SC261)	251(SC261)
	242, 3, 4, 5 & 6 (SC240)	242, 3, 4, 5 & 6 (SC240)	242, 3, 4, 5 & 6 (SC240)	252, 3, 4, 5 & 6 (SC260)	252, 3, 4, 5 & 6 (SC260)

#### PRESS-FIT



241

#### NON-ISOLATED STUD



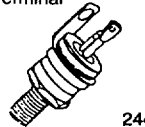
242

#### ISOLATED STUD With Solder Ring Anode Terminal



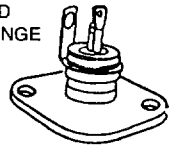
243

#### ISOLATED STUD With Press-On Anode Terminal



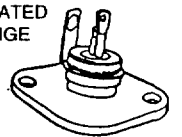
244

#### ISOLATED TO-3 FLANGE



245

#### NON-ISOLATED TO-3 FLANGE



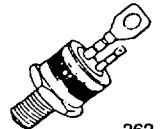
246

#### PRESS-FIT



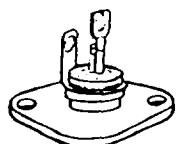
251

#### NON-ISOLATED STUD



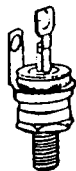
262

#### NON-ISOLATED TO-3 FLANGE



256

ISOLATED STUD  
With Solder Ring  
Anode Terminal



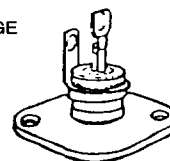
253

ISOLATED STUD  
With Press-On  
Anode Terminal



254

ISOLATED  
TO-3 FLANGE



255