

Main Product Characteristics

$I_{F(AV)}$	2x5A
V_{RWM}	60V
T_J	150°C
$V_{F(Typ)}$	0.435V

■ Features

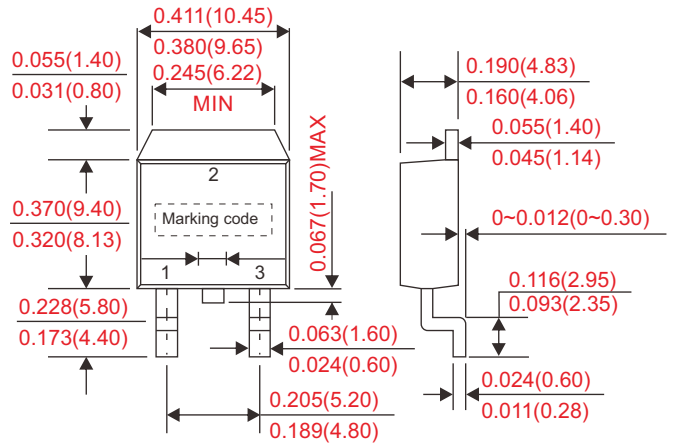
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Lead free in compliance with EU RoHS.

■ Mechanical data

- Epoxy : UL94-V0 rated flame retardant.
- Case : JEDEC TO-263 molded plastic body.
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026.
- Polarity : As marked.
- Weight : Approximated 1.34 gram.

■ Outline

D²PAK(TO-263)



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

■ Circuit Diagram



Parameter	Conditions	Symbol	CTB10S60CTG	UNIT
Working peak reverse voltage		V_{RWM}	60	V
Forward rectified current (total device)		I_O	10	A
Forward surge current (per diode)	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	140	A
Peak repetitive reverse surge current (per diode)	2us - 1kHz	I_{RRM}	2	A
Typical Thermal resistance (per diode)	Junction to case	$R_{\theta JC}$	4	°C/W
	Junction to ambient	$R_{\theta JA}$	60	°C/W
Storage temperature		T_{STG}	-55 ~ +150	°C
Operating Junction temperature		T_J	-55 ~ +150	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop (per diode)	$I_F = 3A, T_J = 25^\circ C$	V_F		440		mV
	$I_F = 5A, T_J = 25^\circ C$			485	520	
	$I_F = 5A, T_J = 125^\circ C$			435		
Reverse current (per diode)	$V_R = 60V, T_J = 25^\circ C$	I_R		0.004	0.08	mA
	$V_R = 60V, T_J = 125^\circ C$			4	20	
Reverse Breakdown voltage (per diode)	$I_R = 0.1mA, T_J = 125^\circ C$	V_{BR}	60			V

■ Rating and characteristic curves

Fig. 1 - Forward Characteristics

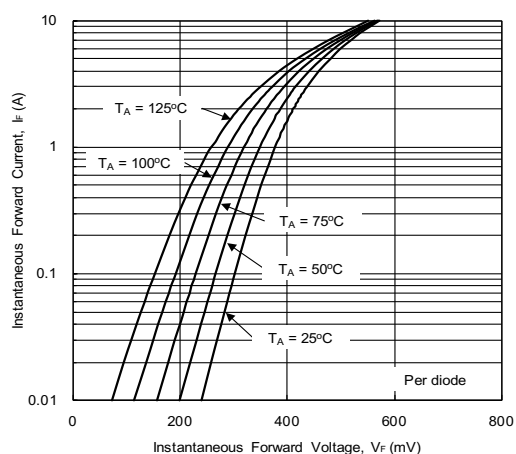


Fig. 2 - Reverse Characteristics

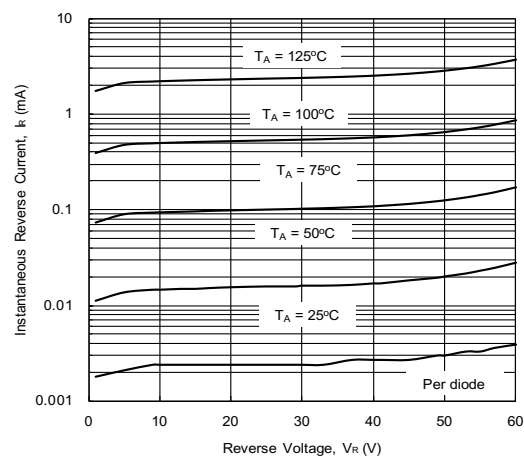


Fig. 3 - Forward Power Dissipation

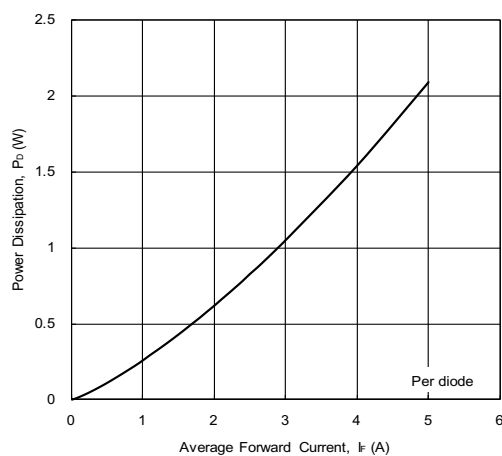


Fig. 4 - Forward Current Derating Curve

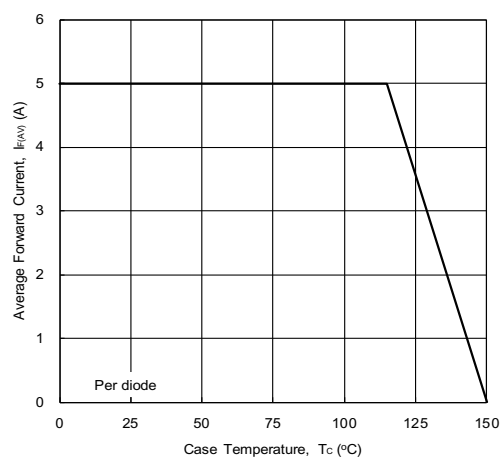
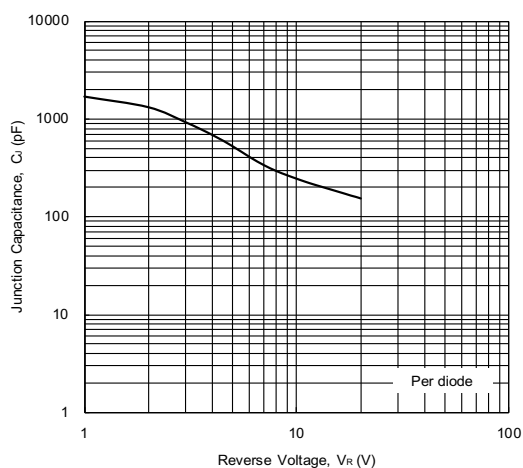
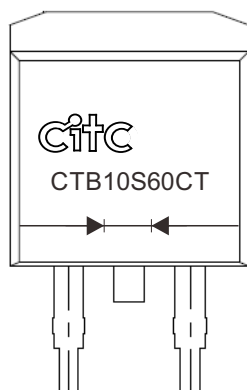


Fig. 5 - Junction Capacitance



■ Marking Information



CTB10S60CT : Product type marking code

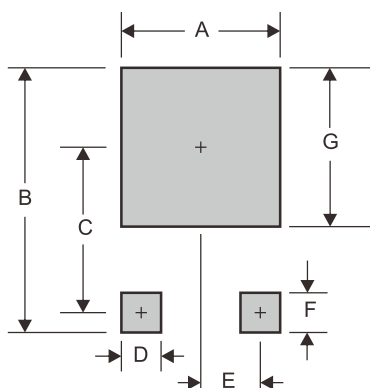
 : CITC Logo

■ Ordering / Packing Information

	Part number	Case	Q'TY/Tube (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen Free	CTB10S60CTG	TO-263	50	1000	5000
			Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
			800	800	4000

Notes : 1. For packaging details please reference our website at <http://www.citcorp.com.tw/tchinese/products/index.php>

■ D²PAK(TO-263) foot print



A	B	C	D	E	F	G
0.425 (10.80)	0.665 (16.90)	0.374 (9.50)	0.071 (1.80)	0.098 (2.50)	0.138 (3.50)	0.449 (11.40)

Dimensions in inches and (millimeters)

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